Lone Mourtain Production Company

P.O. Box 3394 • 408 Petroleum Building • Billings, Montana 59103-3394 (406) 245-5077

July 9, 1985

TECENT

Bureau of Land Management Moab District Office P.O. Box 970 Moab, Utah 84532

JUL 1 1 1985

DIVISION OF OIL GAS & MINING

Gentlemen:

Enclosed please find original and three copies of an APD covering the drilling of our Federal No. 18-4 well in Grand County, Utah for your approval.

Yours very truly,

Lone Mountain Production Co.

James G. Routson Petroleum Engineer

cc: Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Mr. Ken Currey P.O. Box 1491 Fruita, Colorado 81521 Form 3160-3 (November 1983)

UNITED STATES

SUBMIT IN TRIP (Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

(formerly 9-331C) DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT U-38033 6. IF INDIAN. ALLOTTED OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7 DEST AGREEMENT NAME PLUG BACK DRILL [DEEPEN . WINTER CAMP UNIT h. TYPE OF WELL MULTIPLE | SINGLE ZONE ARM OR LEASE NAME WELL X WELL OTHER QUINOCO 2. NAME OF OPERATOR Federal 9. WELL NO. Lone Mountain Production Company 18 - 43 ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT P.O. Box 3394 Billings Montana 5910 1 Undesignated 11. SEC., T., R., M., OR BLK. At surince 350'FWL, 900'FNL At proposed prod. zone JUL 1 1 **1985** NW1NW1 18-17S-25E same 12. COUNTY OR PARISH | 13. STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 miles northwest of Mack, Colorado DIVISION OF OIL

10. DISTANCE FROM PROPOSED*

10. DISTANCE FROM PROPOSED*

10. NO. OF ACRES ASSIGNED

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

2501

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2501 Utah 20. ROTARY OR CABLE TOOLS 952.94 19. PROPOSED DEPTE 350' (Also to nearest drlg. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 45001 Rotary
22. APPROX. DATE WORK WILL START* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>September 11, 1985</u> 5541 GL, 5553 KB 23. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SETTING DEPTH WEIGHT PER FOOT RIZE OF CASING SIZE OF HOLE 175 sacks: Class "G" (to surface 24# H-40 STC 300 ' 8-5/8" new 12 - 1/4"175 sacks RFC 4-1/2" new. 10.5# J-55 ITC 4500' 7**-**7/8" 1. Surface formation is the Mancos. 2. Anticipated geologic markers are: Frontier 3580', Dakota 3883', Morrison 4068', Salt Wash 4383'. 3. Gas is anticipated in the Dakota, Morrison and in the Salt Wash. No oil or other minerals are anticipated. No water sands are expected. 4. Proposed casing program: See Item No. 23 above. 5. Pressure control equipment: See attached well control plan and schematic of drilling contractor's BOP stack, BOP's will be tested before drilling out from under surface casing and checked daily. 6. Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered, chemical-gel type mud will be used, The well will be air drilled from under surface casing to total depth. 7. Auxiliary equipment: See well control plan. (continued on page 2) IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. 24. July 9, <u>19</u>85 Petroleum Engineer SIGNED (This space for Federal or State office use) APPROVAL DATE PERMIT NO. OF UTAH DIVISION OF OIL, GAS, AND MINING APPROVED BY CONDITIONS OF APPROVAL, IF ANY: DATE:

Application for Permit to Drill, Deepen, or Plug Back 18-4 NW $\frac{1}{2}$ NW $\frac{1}{4}$ Section 18-T17S-R 25E Grand County, Utah Lease U-38033

Page 2

- 8. The logging program will consist of a DIL log from TD to base of surface casing, and GR-FDC-CNL logs from TD to above the Frontier. No cores or DST's are planned.
- 9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
- 10. Anticipated spud date is September 11, 1985. Completion operations should commence within 30 days of rig release.
- 11. Survey plats are attached.
- 12. The gas is dedicated to Southwest Gas Company.
- 13. The spacing unit will be the N_2^1 of Section 18.
- 14. Designation of Operator forms from Quinoco will be sent to the BLM in Moab, Utah.
- 15. The well will be drilled under Quinoco's bond.

AVEYED 5-22-85 ENERGY 715 HORIZON DRIVE, SUITE 330 BCALE 1" . 1000"

DRAWN 6-1-85 SURVEYS & ENGINEERING CORP.

715 HORIZON DRIVE, SUITE 330 GRAND JUNCTION, CO 81501 (303) 245 - 7221

JOB NO. SHEET OF

Lone Mountain Production Company Federal No. 18-4 WELL CONTROL PLAN

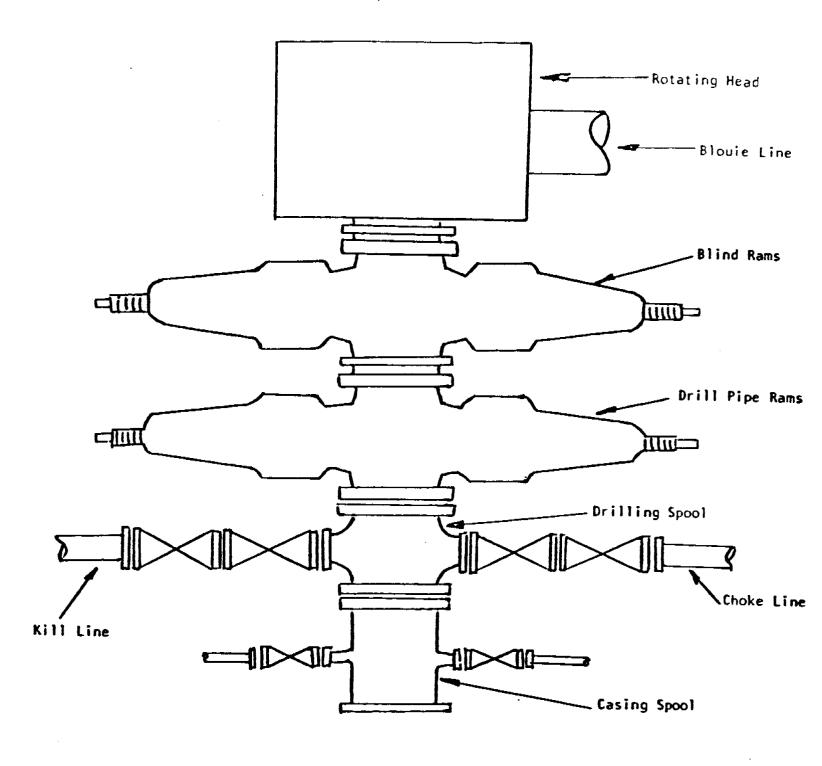
- 1. Surface Casing: 8-5/8" O.D., 24#/ft., Grade H-40,ST&C, set at 300° or deeper, cemented with pump and plug method back to the surface or bottom of cellar.
- 2. Casinghead Flange: $8-5/8'' \times 8''-900$ Series casinghead with two 2'' 2000 psi L.P. outlets.
- 3. Intermediate Casing: None
- 4. Blowout Preventor: An 8" 3000 psig W.P. double gate hydraulic shaffer BOP (or equivalent) with drill rams and blind rams. All fill, kill and choke lines will be minimium of 2" 2000 psi W.P. A Grant rotating head will be used while air and mist drilling. BOP's will be worked daily. Blind rams will be checked during trips. BOP's will be tested to 1000 psi prior to drilling shoe joint on surface casing.
- 5. Auxiliary Equipment: (a) Drill pipe floots will be allowed at contractor's discretion. (b) Visual monitoring of air returns will be maintained. (c) Upper kelly cock will be used. (d) Stabbing valve will be kept on floor.
- 6. Anticipated bottom hole pressure is less than 1200 psi at 3883 or a gradient of 309 psi/ft or less. No abnormal temperatures or hydrogen sulfide gas are anticipated.

James G. Routson
Petroleum Engineer

SCILL BITTE OF BUT STACK

Air drilled wells using 900 series wellhead equipment.

Interval from 300' to total depth.



SURFACE USE PROGRAM

Lone Mountain Production Company Federal #18-4 NW1NW1, Sec.18-T17S-R25E, S.L.M. Grand County, Utah

Existing Roads

See Vicinity Map, Topo and Access Map and Plat #1. This proposed well is located approximately 20 air miles northwest of Mack, Colorado. It is reached by going west of Mack on Old Highway 6850 3.5 miles west of the Colorado-Utah border. Turn right and go 5.6 miles to the "T" intersection. Turn right and go 2.7 miles north to the "Y", turn right and go 1.3 miles; turn left (main road) and go 4.0 miles up San Arroyo Canyon. All of the existing roads use for access are county roads. Lone Mountain will share maintenance on those graver/dirt roads with Grand County and the other oil and gas operators in the area. The existing roads are colored green on the reference map.

2. Access Roads to be Constructed and Reconstructed

The 100' of new access road will be incorporated into the Northwest end of the well pad. The width will be 20 feet.

3. Location of Existing Wells

See Map #3. There are 3 producing wells and 2 abandoned wells within 1 mile of the proposed location.

4. Location of Production Facilities

a) On Well Pad. See Plat #4. (Paint everything dark green)

5. Location and Type of Water Supply

The water source for this well is West Salt Creek. The pickup point is on Old Highway 6850 about 2.5 miles west of Mack, Colorado. The water will be hauled over the well access road.

6. Source of Construction Materials

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside material will be brought in.

7. Methods for Handling Waste Disposal

Cuttings will be buried in the reserve pit at clean up. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary land fill. Human waste will be disposed of in chemically treated sanitary pits.

Drilling fluids will be contained in the reserve pit and left to evaporate. Any fluids produced during testing operations will be collected in a test tank. If a test tank is not available, the

7. (continued)

fluids will be contained in the reserve pit. Any spills of oil, gas, salt water or noxious fluid will be cleaned up and removed.

If the well is productive, produced water will be disposed of on site for 30 days only, or 90 days with the permission of the District Manager. After that time, application will be made for approval of permanent disposal method in compliance with old MMS Order NTL-2B, and the rules and regulations of the State of Utah.

8. Ancillary facilities:

No ancillary facilities are planned.

9. Wellsite Layout

See Plat #2 - Pit and Pad Layout See Plat #2A - Cross Sections of Pit and Pad See Plat #3 - Rig Layout

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and fracturing equipment.

The location construction will begin by stripping and stockpiling all available (4-6") topsoil. The stockpile will be along the north uphill edge of the location.

The reserve pit will be constructed along the north side of the well pad. The pit will be fenced on three sides during drilling and closed on the fourth side at rig release. The fence will be maintained through completion and while the pit area is drying.

10. Plans for Reclamation of the Surface

If the well is productive, the reserve pit will be allowed to dry and then backfilled. All of the area not necessary for production will be resloped, covered with available topsoil and revegatated using a seed formula supplied by the BLM.

If the well is abandoned, the entire area of disturbance will be returned to a reasonable contour approximating the topography of the surrounding area. The topsoil will be distributed over the recontoured area and revegetated using the approporate seed formula.

Clean-up will begin after completion rig release and resloping should be completed by the Fall of 1985.

11. Surface Ownership

All lands involving new construction are Federal lands.

<u>Surface Use Program - Page 3</u>

12. Other Information

The well site is in the bottom of San Arroyo Canyon on a bench. The vegetation is sparce and includes juniper, sagebrush, western wheatgrass, Indian rice grass and a few annual plants.

13. Lessee's or Operator's Representatives and Certification

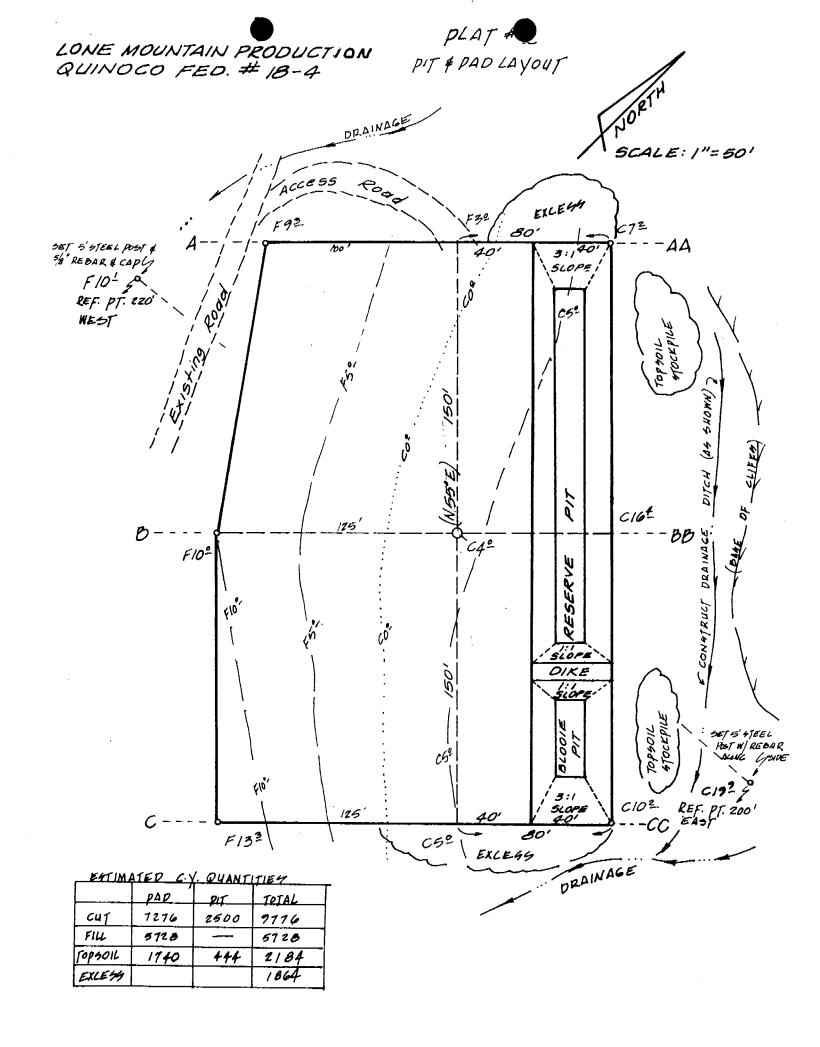
James G. Routson Lone Mountain Production Co. P.O. Box 3394 Billings, Montana 59103 Office Phone: 406-245-5077 Home Phone: 406-245-8797

Ken Currey
Field Consultant
P.O. Box 1491
Fruita, Colorado 81521
Office/Home: 303-858-3257
Mobile: 303-245-3660,Unit 5858

I hereby certify that I, or persons under my supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Lone Mountain Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

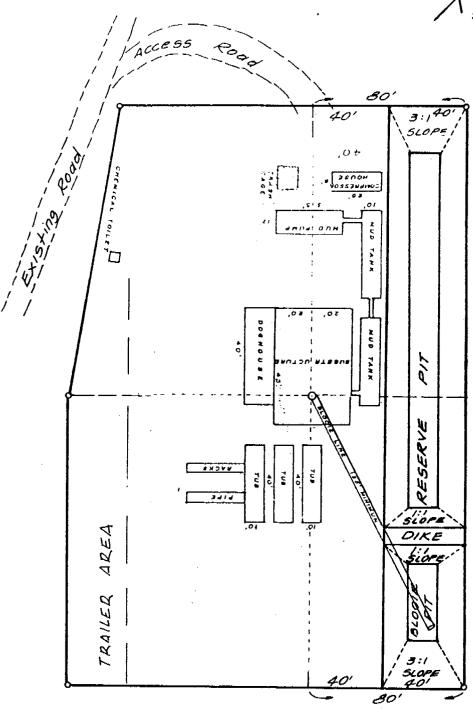
July 9, 1785

James &-Routson

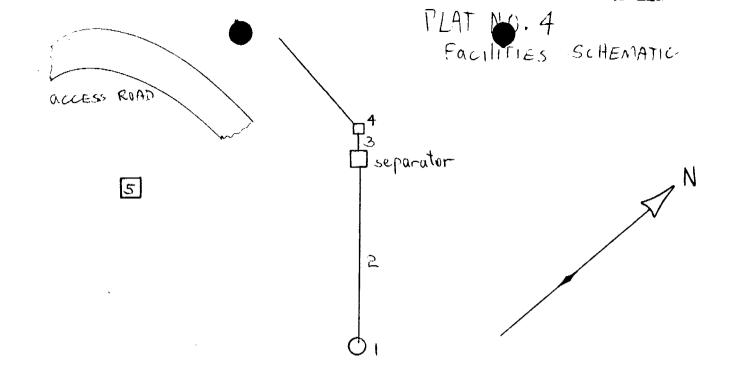


LONE MOUNTAIN PED. QUINOCO FEO. # 18-4 PLAT #3 RIG LAYOUT

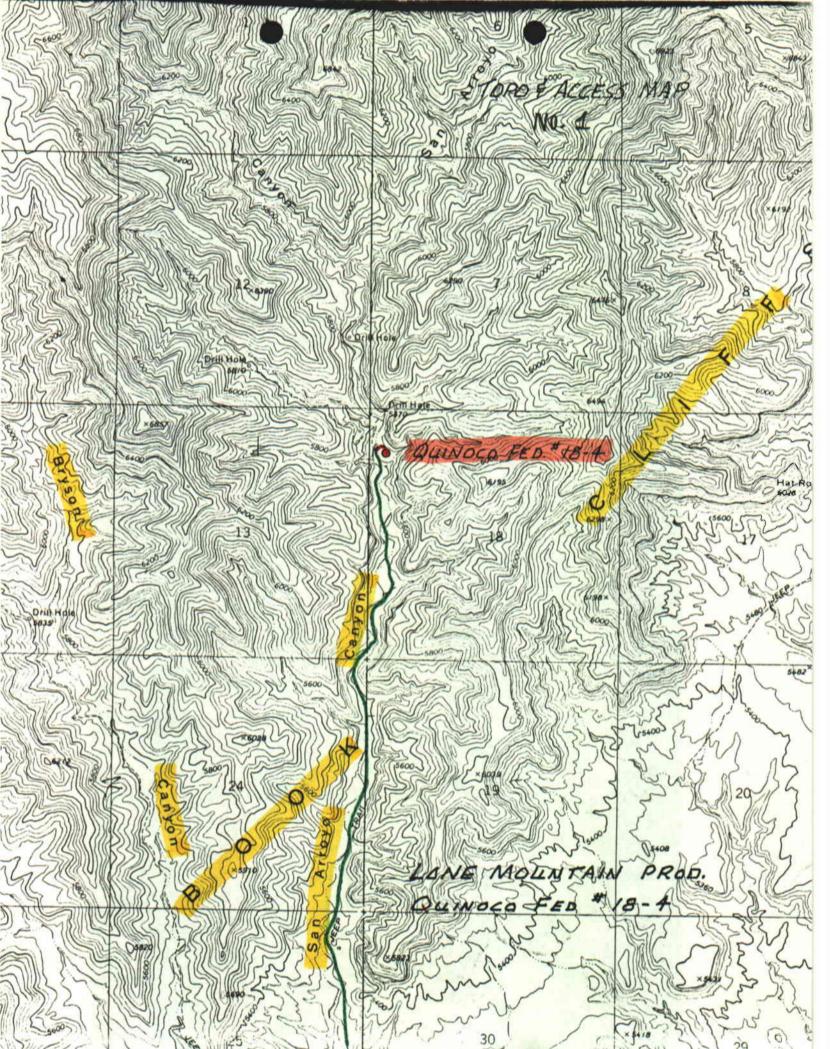
10PTH 5CALE: 1"= 50'

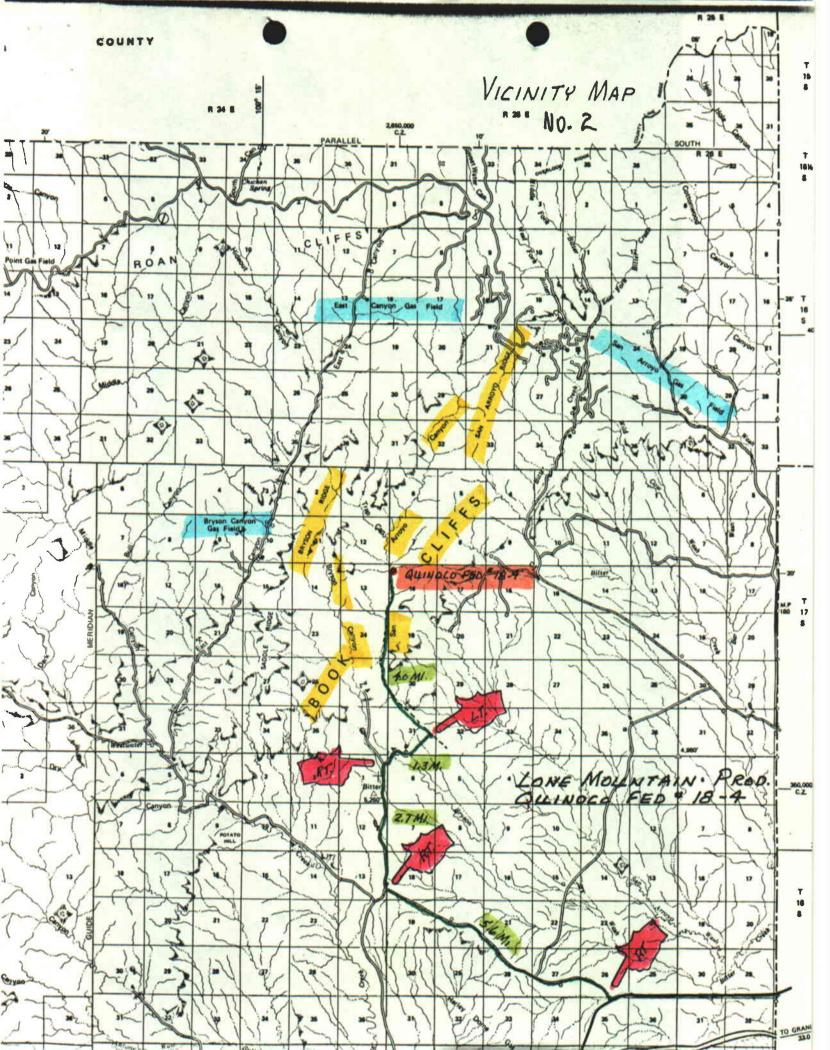


LONE MOUNTAIN PRODUCTION QUINOCO FED. # 18-4 LOC.



- 1. Wellhead will be an 8-5/8" Larkin Fig. 92 or equivalent. Tubing head will be a 41/2" x 6"-900 Series with two 2" 3000 psi screwed valves. Tree will be 2" screwed x 2000 psi W.P.
- 2. Line between wellhead and separator will be approximately 100 feet in length and constructed of 2-3/8" .218 wall seamless, welded, wrapped and buried approximately 5 feet deep.
- Line between separator and meter will be 4" or 4.028 OD seamless, welded, coated, wrapped and buried, and will be approximately 25 feet in length.
- 4. Meter run will be American 2" run, or equivalent, 1000 psi static rating, 100" of water differential rating.
- 5. Pit will be 10'x 10', enclosed by dikes and fenced.

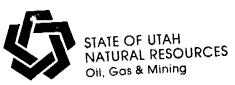




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OPERATOR Low Mountain	· Production Co.	DATE 7-16-85
WELL/NAME Tesleral 18-4		
SEC NWNW 18 T 175	R 25E COUNTY 5	Grand
43-019- 3/196 API NUMBER	Les Contractions of the Contraction of the Contract	
CHECK OFF:		
PLAT	BOND	NEAREST WELL
LEASE	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS:	00	
Water - mick Co	<u> </u>	
Designation from Buston	Harrock Operator Wis	ter Cours Unit)
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APPROVAL LETTER:		
SPACING: A-3 Winter Coams	c-3-a	CAUSE NO. & DATE
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STIPULATIONS: Compution from	Biston Hancock	
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Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 29, 1985

Lone Mountain Production Company P. O. Box 3394 Billings, Montana 59103

Gentlemen:

Re: Well No. Quinoco Federal 18-4 - NW NW Sec. 18, T. 17S, R. 25E 900' FNL, 350' FWL - Grand County, Utah

Approval to drill the above-referenced gas well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

In addition, the following actions are necessary to fully comply with this approval:

- Spudding notification to the Division within 24 hours after drilling operations commence.
- Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
- 4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31196.

Sincerely,

Associate Director, Oil & Gas

as

Enclosures

cc: Branch of Fluid Minerals

Form 3160-3

SUBMIT IN TRIPLICA

Form approved.

(November 1983) (formerly 9-331C)	UNIT	TED STATES	reverse (Other instr		Expires August	31, 1985
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7-7/8"	<u>4-1/2" new</u>	10.5# J-55	LTC 4500!	175	sacks RFC	·
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zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive

2 3 AUG 1985

APPROVED BY S C. WELLING BACKUS CONDITIONS OF APPROVAL, IF ANY;

DISTRICT MANAGER

THE HONS OF APPROVAL ATTACHED

*See Instructions On Reverse Side

Lone Mountain Production Company Well No. Wintercamp Unit Federal 18-4 Sec. 18, T. 17 S., R. 25 E. Grand County, Utah Lease U-38033

CONDITIONS OF APPROVAL

A. DRILLING PROGRAM

A backup source capable of closing the B.O.P.'s in case of a primary source failure will be available.

All pressure tests on the B.O.P.E. will be recorded in the driller's log.

Both casing strings will be tested to at least 1000 psi. This will be recorded in the driller's log.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Office. If operations are to be suspended, prior approval of the District Office will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the Area Office within a minimum of 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Order No. 1 this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continued each month until the well is plugged and abandoned. This report will be sent to the District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: 'Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Area Office in accordance with requirements of NTL-3A.

If a replacement rig is needed for completion operations, A Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations verbal approval to bring on a replacement rig will be approved through the District Office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

If the well is to be completed for production the Area Office is to be contacted in order to set up a pre-production conference. When the well is placed in a producing status the District Office is to be notified by telegram or other written communication within five working days.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

No well abandonment operations will be commenced without the prior approval of the District Office. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Office. A Subsequent Report of Abandonment (Form 3160-5) will be sent to the District Office within 30 days following completion of the well for abandoment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Office, or the appropriate surface managing agency. Upon completion of approved plugging, a dry hole marker will be erected in accordance with 43 CFR 3162.6. The top of the marker will be closed or capped. The following minimum information will be permanently placed on the marker; "Fed" or "Ind", as applicable, "Lease number", "Well number", location of well by 1/41/4 section, township, and range.

B. SURFACE USE PROGRAM

The operator will contact the Grand Resource Area at (801) 259-8193, forty-eight (48) hours prior to beginning any dirt work on this location.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling of the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

Immediately upon completion of drilling, the location, and <u>surrounding areas will be cleared of all remaining debris, materials, trash, and junk not required for production.</u>

Produced waste water will be confined to a pit.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

The operator or his contractor will notify the Grand Resource Area at (801) 259-8193 forty-eight (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

The following seed mixture will be used:

•			
Species			lbs/acre
Grasses			
Sporobolus cryptandrus Hilaria jamesii Agropyron smithii	Sand dropsee Galleta (Cur Western whea	lygrass)	1 1
Forbs			
Melilotus officinalis Helianthus annuus	Yellow sweet Common sunfl		1/2 1/2
Shrubs			
Eurotia lanata Atriplex canescens	Ninterfat (W Fourwing sal		1
			6 lbs/acre
Broadcast seed will be applie	ed at double	the above rate.	
Final location release will successful (when perennial v			hown to be
Your contact with the Distri	ct Office is:		
Greg Noble , Petroleum	Engineer	Office Phone: (80	1)259-6111
		Home Phone:	
Distric	t Address:		
	ood, P.O. Box Jtah 84532	970	
	Your contact Area Office	with the Grand Re is:	source
Jeff Robbins		Office Phone: (80	1)259-8193
		Home Phone: (801)	259-7964

Area Office Address:

Sand Flats Road, P.O. Box M Moab, Utah 84532

DIVISION OF OIL, GAS AND MINING

	SPUDDING INFORMATIO	API #43-019-31196	
NAME OF COMPANY: Lond	e Mountain Producti	on Company	
WELL NAME: Qui	noco Federal 18 -4		
SECTION NW NW 18 TOWNSHIP	17S RANGE 2	5E COUNTY Grand	
DRILLING CONTRACTOR	Carmack Well Serv	ice	
RIG #_20			
SPUDDED: DATE 9-24-85			
TIME 12:30 PM			
HOW Rotary			
DRILLING WILL COMMENCE			
REPORTED BY Bonnie Paul			
TELEPHONE # (406) 245-5	077		
DATE 9-25-85	SIG	GNEDs	

SPUDDING INFORMATION

OGCC FORM 4

OIL AND GAS CONSERVATION COMMISSION

2

DEPARTMENT OF NATURAL RESOURCES

File in	THE STATE OF COLORADO duplicate for Patented and Federal 1		5. LEASE DESIGNATION AND SERIAL NO.
	OTICES AND REPORTS O	N WELLS	U-38033 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
(Do not use this form for p Use "APP	roposals to drill or to deepen or plug ba	ck to a different reservoir.	
I. OIL □ CAS 「▼		HECFINED	7. UNIT AGREEMENT NAME
WELL WELL OTHI	er		Wintercamp
2. NAME OF OPERATOR		07 1095	8. FARM OR LEASE NAME
Lone Mountain Pro	duction Company	SEP 27 1985	Federal
ADDRESS OF OPERATOR			9. WELL NO.
P.O. Box 3394, Bi	11ings, Montana 59103 ion clearly and in accordance with any S	DIVISION OF OIL	18-4
See also space 17 below.)	ion clearly and in accordance with any S	GAS & MINING	10. FIELD AND POOL, OR WILDCAT
At surface		<u> </u>	Undesignated
At proposed prod. zone	350' FWL, 900' FNL		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
			NW4 NW4 18-17S 25 E
14. PERMIT NO. API #43 019 31196	15. ELEVATIONS (Show whether DF, 5541 GL, 5553 KB	RT, GR, etc.)	12. COUNTY 13. STATE Utah
Check	Appropriate Box To Indicate No		
NOTICE OF	INTENTION TO:	SUBBE	QUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDON	SHOOTING OR ACIDIZING	ABANDONMENT
REPAIR WELL	CHANGE PLANS	(Other) Spud	
(Other)		(NOTE: Report resur Completion or Recom	ts of multiple completion on Well pletion Report and Log form.)
Spudded 12≟'' ho	le at 12:30 P.M. 9/24/85	. Carmack Well Ser	vice Rig No. 20.
18. I hereby certify that the force SIGNED (This space for Federal or Sta	A Daughan TIPLE	President	9/25/85
APPROVED BY	, IF ANY:		DATE

(N. 1	UNITED STATES THE OF THE INT EAU SLAND MANAGEM		5. LEASE DESIGNATION A	SI, 1983 NO BERIAL ST
	TICES AND REPORT	S Of WELLS lug book to a different reservoir.	3. IF INDIAN, ALLOTTEZ	OR TRUE NAME
OLC GAS X OTHER WELL TELL X OTHER 2. NAME OF OPERATOR		HECEIVED	7. UNIT AGREEMENT NAS Wintercamp 8. FARM OR LEASE NAME	
Lone Mountain Product	ion Company	OCT 07 1985	Federal	
P.O. Box 3394, Billir DOCATION OF WELL (Report location See also space 17 below.) At surface	ngs, Montana a clearly and in accordance with	SAS & MINING	18-4 10. FIELD AND POOL, OR Undesignated	WILDCAT
350' FWL, 900' FNL	-		11. SEC., T., E., M., OR BE SURVEY OR AREA NW4 NW4 Sec.	
14. PERMIT NO. API #43 019 31196	15. ELEVATIONS (Show wheth		12. COUNTY OR PARISH	
		ie Nature of Notice, Report, o		
NOTICE OF INT	r		SEQUENT REPORT OF:	
FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON®	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CAS	BING
(Other) 17. DESCRIBE PROPOSED OR COMPLETED C proposed work. If well is directed to this work.)*	CHANGE PLANS DEFERATIONS (Clearly state all peritionally drilled, give subsurface		sults of multiple completion of our pletion of our pletion Report and Log form	
KB corrected from pr Drilled 12¼" hole to Class H, 3% CaCl ₂ .	330'. Ran 8 - 5/8",	24#, J-55 casing to to surface.	329'. Cemented wi	th 175 sx
Drilled 7-7/8" hole Cemented with 175 sx	to 4507'. Ran $4\frac{1}{2}$ '', Thixotropic cement	10.5#, J-55 casing to . Rig released 2:00	4169'. PBTD 4131 P.M. 10/1/85.	١,
Will move in complet	ion rig about 10/15	/85		
Log Tops:	Dakota Silt Dakota Sand Morrison Salt Wash	3815 3904 4030 4364		LE C
S. I hereby certify that the foregoing SIGNED Queen D-RW	2	Petroleum Engineer	DATE 10/2	/85
(This space for Federal or State of	flice use)			
APPROVED BY CONDITIONS OF APPROVAL, IF			DATE	

*See Instructions on Reverse Side

RECEIVED

OCT 07 1985

DIVISION OF OIL GAS & MINING

FEDERAL NO. 18-4

NW/NW SECTION 18, T17S, R25E

GRAND COUNTY, UTAH

GEOLOGIC REPORT

BY

BILL NAGEL

ROCKY MOUNTAIN GEO-ENGINEERING COMPANY

WELL SUMMARY

OPERATOR:

LONE MOUNTAIN PRODUCTION COMPANY

WELL NAME:

FEDERAL NO. 18-4

LOCATION:

NW/NW SECTION 18, T17S, R25E

FOOTAGE:

900' FNL - 350' FWL

COUNTY:

GRAND

STATE:

UTAH

AREA:

SOUTH SAN ARROYO PROSPECT

ELEVATION:

GL 5541' - KB 5545'

SPUD DATE:

9/24/85

COMPLETION DATE:

9/30/85

DRILLING ENGINEER:

GLENN ROSS

WELLSITE GEOLOGY:

GEOLOGIST:

BILL NAGEL

DRILLING CONTRACTOR:

CARMACK WELL SERVICE, INC.

ROCKY MOUNTAIN GEO-ENGINEERING COMPANY

RIG:

RIG #20

TOOL PUSHER:

CHRIS CARMACK

HOLE SIZE:

12½" TO 330'; 7 7/8" TO T.D.

CASING RECORD:

8 5/8" TO 329'

AIR COMPRESSORS:

FRONTIER AIR DRILLING COMPANY

ELECTRIC LOGGING:

SCHLUMBERGER

TYPE OF LOGS RUN:

DIL-GR-SP, GR-FDC-CNL

OBJECTIVE:

DAKOTA, MORRISON

TOTAL DEPTH:

4507'

STATUS:

RUN 412" PRODUCTION CASING

FEDERAL NO. 18-4 NW/NW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

WELL	CHRONOLOGY	,
WH!	I HKI IMUI I III T	

T985 DATE	MDNT Depth	FTG/ DAY	DAILY OPERATIONS
9/24	-0-	120	DRLG MOUSEHOLE - DRLG SURFACE - WORK HOLE - MIX MUD & DRL AHEAD
9/25	120	210	DRLG - POOH & RUN CSG - CMT CSG - WOC - DIG CELLAR
9/26	330	385	NIPPLE UP - RUN BLOOIE LINE - PRESS TEST - WAIT ON FLANGE - PRESS TEST BOP - DRLG CMT - DRLG AHEAD
9/27	715	1678	DRLG AHEAD
9/28	2393	590	WO SWIVEL - DRLG AHEAD
9/29	2983	1524	DRLG - CHG OUT SWIVEL - DRLG - REPAIR HYDRO HOSE - DRLG - MIST UP - DRLG AHEAD
9/30	4507	-0-	CIRC - MIX MUD - MUD UP - CIRC - SHORT TRIP - CIRC- POOH - RUN E-LOGS

BIT RECORD

WELL NAME:	FEDERAL 18-4	ELEVATION:	GL 5541' - KB 5545'
------------	--------------	------------	---------------------

CO. NAME: LONE MOUNTAIN PROD. CO. SECTION: S18-T17S-R25E

CONTRACTOR: CARMACK WELL SERVRIG# 20 CO. & STATE: GRAND, UTAH

SPUD DATE: 9/24/85 T.D. DATE: 9/30/8t

	BIT RECORD									FT PER/DAY		
RUN	SIZE	MAKE	TYPE	XMX	FTG	HOURS	FT/HR	DATE	DEPTH	FT	DEPTH	DEV.
1	12 ¼"		OSC	330	330	20 ½	16.1	9/24	-0-	120	151	1
2	7 7/8	SANDVIK	CFS30	4507	4177	67	62.3	9/25	120	210	305	1
	-			at a				9/26	330	385	809	14
·				:				9/27	715	1678	1333	14
								9/28	2393	590	1834	1 1/2
				:	_			9/29	2983	1524	2330	"
				:				9/30	4507	- 0-	2826	11
				4			:	1 V .		-	3323	11
	_				<u></u>						3852	2 3/
											4507	4
	-											
								:				
	<u> </u>											
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				:								
<u> </u>	-		<u> </u>									
. <u>.</u>				:								
							;					
				· .								

LONE MOUNTAIN PRODUCTION COMPANY FEDERAL NO. 18-4 NWNW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

SAMPLE DESCRIPTIONS

2900-2940	100%	SH dkgy frm blky-plty
2940-2970	100%	SH AA w/occ slsdy & slty
2970-3000	100%	SH dkgy frm blky-plty /occ slslty
3000-3030	100%	SH dkgy frm blky-plty
3030-3090	100%	SH dkgy frm blky-plty /occ slslty
3090-3240	100%	SH dkgy frm blky-plty
3240-3270	100%	SH dkgy frm blky-plty /occ slslty
3270-3310	100%	SH AA
0270,0070	TR	BENT wh sft plty
3310-3400	100%	SH dkgy frm blky-plty /occ slslty
3400-3460	100%	SH dkgy frm blky-plty /occ slslty & sndy
3460-3490	100%	SH dkgy frm blky-plty /occ slslty
0,00	TR	CALC FRAG clr
3490-3535	100%	SH dkgy frm blky-plty
3535-3550	100%	SH AA
	TR	CALC FRAG clr
3550-3595		SH dkgy frm blky
3595-3610	100%	
3610-3625	100%	SH blk frm blky-plty
	TR	PYR
3625-3640	100%	SH AA
	TR	CALC FRAG clr
3640-3655	100%	SH AA
3655-3685	100%	SH blk frm blky-plty
3685-3715	100%	SH blk-dkgy frm blky-plty
3715-3730	100%	SH dkgy frm blky-plty
	TR	BENT wh sft plty
3730-3745	90%	SH AA
	10%	SS clr vfg mcmt msrt sbang-sbrd slarg
3745-3760	70%	SH dkgy frm blky-plty
	30%	SS ltgy vfg mcmt msrt sbang-sbrd glac incl sl arg
3760-3775	60%	SH AA
	40%	SS lt-mgy vfg mcmt msrt sbang-sbrd glac & pyr incl
3775-3790	80%	SH dkgy frm blky-plty slandy
	20%	SS AA
37903805	80%	SH AA
	20%	SS clr vfg-fg mcmt msrt sbang-sbrd slarg
3805-3820	60%	SH AA
	40%	SS clr mgy vfg mcmt msrt sbang-sbrd mod-arg
3820-3835	70%	SH dkgy frm blky-plty /occ sdy
	30%	SS AA
3835-3850	70%	SH AA
	30%	SS mgy vfg mcmt msrt sbang-sbrd arg
****	TR	BENT whisft plty
3850-3865	100%	SH dkgy frm blky-plty /occ sdy
2000 2000	ABNT	BENT wh sft plty
3865-3880	80%	SH AA
	20%	SS clr vfg uncons msrt sbang
2020 2025	TR	BENT wh sft plty
3920-3935	80%	SH AA
	20%	SS clr-ltgy vfg p-mcmt msrt sbang-sbrd
	ABNT	BENT wh-ltbrn sft plty

```
SS ltgy vfg m-wcmt m-wsrt sbang-sbrd slcalc
3935-3950
            100%
            100%
                   SS clr f-vfg uncons m-wsrt sbrd
3950-3985
                   SH dkgy-blk frm blky-plty
            100%
3985-4000
                   SH AA
             70%
4000-4015
             30%
                   SS AA
                   NO RETURNS (HOLE DAMP)
4015-4045
                   SH dkgy occ ltgy frm-hd blky-plty
             50%
4045-4060
                   SS ltgy f-vfg wcmt msrt sbang-sbrd sil-cmt occ arg
             50%
             70%
                   SH AA
4060-4075
                   SS ltgy-clr vfg wcmt msrt sbrd sil-cmt arg
             30%
                   SH ltgy red ltgn frm-hd blky-plty occ slsdy
4075-4090
             80%
             20%
                   SŞ AA
             80%
                   SH AA
4090-4105
                   SS clr vfg wcmt m-wsrt sbang-sbrd sil-cmt
             20%
            100%
                   SH AA
4105-4120
4120-4135
             80%
                   SH AA
                   SS wh vfg wcmt m-wsrt sbang-sbrd sil-cmt cly fl
             20%
                   SH ltgy occ red-mar frm-hd blky-plty occ sdy
4135-4150
             80%
             20%
                   SS AA
             80%
                   SH AA /occ purp
4150-4165
                   SS wh-ltgy vfg wcmt m-wsrt sbrd sil-cmt slarg
             20%
                   SH ltgy-ltgn red purp hd-frm blky-plty
4165-4195
            100%
4195-4210
             90%
                   SH ltgy-ltgn red hd-frm blky-plty
                   SS clr-wh vfg wcmt msrt sbrd occ SH INCL
             10%
                   SH ltgy red ltgn hd-frm blky-plty
             90%
4210-4225
             10%
                   SS AA
4225-4240
             80%
                   SH AA
                   SS clr-wh f-vfg wcmt sil-cmt msrt sbrd occ cly fl
             20%
                   SH ltgy-ltgn red pnk sft-hd blky-plty occ slty
             90%
4240-4255
             10%
                   SS AA
                   CHT FRAG gn hd
              TR
                   SH red ltgy-ltgn frm-hd blky-plty occ slty
            100%
4255-4270
4270-4385
             90%
                   SH AA
                   SS pnk vfg wcmt m-wsrt sbrd sil-cmt
             10%
                   SH red mar purp ltgy-ltgn frm-hd blky-plty occ slty
4285-4300
            100%
4300-4315
             90%
                   SS wh-clr vfg wcmt sil-cmt msrt sbrd
             10%
                   SH red frm blky-plty occ slty
4315-4345
            100%
                   SH AA
4345-4360
             90%
             10%
                   SS clr vfg wcmt sil-cmt sbang-sbrd
                   SH red mar purp frm-hd blky-plty occ slty
4360-4375
             80%
                   SS clr-whevfg wcmt sil-cmt msrt sbang-sbrd
             20%
4375-4390
             70%
                   SH AA
                   SS clr-wh vfg wcmt sil-cmt msrt sbang-sbrd slarg
             30%
                   SH red ltgy purp frm-hd blky-plty slslty
             60%
4390-4405
                   SS ltgy vfg wcmt silcmt wsrt sbrd occ slarg
             40%
                   SS clr-ltgy ltgn vfg wcmt wsrt sbrd slty
4405-4420
             60%
                   SH AA
             40%
                   SS AA
             60%
4420-4435
                   SH red ltgy purp ltgn frm blky-plty
             40%
                   SS ltgy-clr vfg m-wcmt sil cmt m-wsrt sbrd-sbagn
4435-4450
             50%
             50%
                   SH ltgy-ltgn frm-dh blky-plty
                   SH red ltgy-ltgn frm-hd blky-plty slslty
             70%
4450-4465
                   SS AA
             30%
4465-4480
             70%
                   SH AA
             30%
                   SS clr vfg m-wcmt msrt sbang-sbrd
```

LONE MOUNTAIN PRODUCTION MPANY FEDERAL NO. 18-4 SAMPLE DESCRIPTION CONTINUED

4480-4495	70%	SH red ltgy-ltgn frm-hd blky-plty slslty
	30%	SS AA
4495-4507	80%	SH AA
	20%	SS ltgy-clr vfg m-wcmt msrt sbang-sbrd

LONE MOUNTAIN PRODUCTION COMPANY FEDERAL NO. 18-4 NW/NW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

	FORMATION 7	FORMATION TOPS		
FORMATION	SAMPLE	E-LOG	DATUM	
MANCOS	SURFACE			
FRONTIER	3570'	3548'	+1997	
DAKOTA SILT	3842'	38251	+1720	
DAKOTA	3906'	3890'	+1655	
MORRISON	4080'	4032'	+1513	
SALT WASH	4385'	4363'	+1182	

GEOLOGIC SUMMARY AND ZONES OF INTEREST

Lone Mountain Production Company's Federal No. 18-4 well was a Dakota and Morrison test. The well was located in the NW/NW Section 18, T17S, R25E of Grand County, Utah. Spudded in the lower Mesaverde Formation on September 24, 1985, the well was drilled to a total depth of 4507' in the Salt Wash Member of the Morrison Formation on September 30, 1985. Production casing was run to the total depth.

MANCOS FM (SURFACE - 35481)

The Mancos Formation consisted of dark gray, firm, blocky to platy shale. This shale was occasionally silty and sandy with traces of calcite crystals.

There were no gas shows in the lower Mancos Formation. Background gas was 2 units and connection gas recorded 90 to 180 units.

FRONTIER FM (3548' - 3828')

The Frontier Formation was predominantly shale with beds of sandstone near the base. The shale was black, dark gray, firm, blocky to platy and was occasionally silty with traces of bentonite. At 3510' the Frontier Shale began changing to black from a dark gray. The sandstone was light to medium gray, clear, very fine grained, medium cemented, medium sorted, subrounded to subangular and argillaceous with occasional glauconite inclusions.

Two gas shows noted in the Frontier Shale occurred at 3623'-3630' of 38 units and at 3765'-3771' of 10 units. Background gas ranged between 2-10 units and connection gas was noted from 90-220 units.

DAKOTA SILT (3825' - 38901)

The Dakota Silt was composed of interbedded sandstone and shale. The sandstone was medium gray, clear, very fine grained, unconsolidated-medium cemented, medium sorted, subangular-subrounded and slightly argillaceous. Shale was dark gray to black, firm and blocky to platy.

There were no gas shows noted in the Dakota Silt. Background gas was 2 units and connection gas was 150 units.

DAKOTA FM (3890' - 4032')

The Dakota Formation contained three sandstone beds with shale inbetween the beds. The top sandstone bed at 3904'-3919' was a clear, very fine grained, unconsolidated, medium sorted and subangular sandstone. A gas show of 150 units was noted during the drilling of this sandstone. Although there was no flare during this gas show, the next connection gas of 450 units did flare. Electric logs showed this sandstone to have very good crossover with an average of 10% porosity.

The second sandstone of the Dakota was at 3940'-3973'. This sandstone was clear, light gray, very fine to fine grained, unconsolidate, medium to well sorted and subrounded to subangular. During the drilling of this sand interval, the gas increased to 230 units with no flare. Connection gas increased to 700 units with flaring continuing until T. D. Electric logs showed this zone to have very good crossover with an average of 11% porosity.

LONE MOUNTAIN PRODUCTION CO. FEDERAL NO. 18-4
GEOLOGIC SUMMARY CONTINUED

The last Dakota sandstone bed occurred at 3998'-4019'. This sandstone was clear, very fine to fine grained, unconsolidated, medium to well sorted and subrounded. The hole became wet during the drilling of this zone and it became necessary to start drilling with air mist. There were no gas shows noted in this sandstone interval. Electric logs showed the sandstone bed to be wet.

MORRISON FM (4032' - T.D.)

The upper member of the Morrison, the Brushy Basin (4032'-4363'), was composed primarily of shale with occasional sandstone beds. The shale was light gray, light green, red, purple, maroon, soft to hard, plty to blocky and occasionally sandy. The sandstone was clear, white, pink, very fine grained, well cemented, medium to well cemented and subrounded to subangular. There were no gas shows noted in the Brush Basin Member. Background gas was 135-150 units and connection gas was 400-600 units.

The lower member of the Morrison, the Salt Wash (4363' - T.D.), contained interbedded sandstone and shale. The sandstone was light gray, and clear, white, very fine grained, medium to well cemented, medium to well sorted and subangular to subrounded. A gas increase of 45 units was noted in the Salt Wash at 4445'-4455'. Background gas was 135-180 units and connection gas was 420-500 units.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 4241 State Office Building Salt Lake City, UT 84114



SET 07 1985

WYSION UNA

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & N	umber	Federa	l No.	18-4								
Operator Lon	e Mountain	Produ	ction	Co.	Address	P.O.	Вох	3394	, Billi	ngs, MT 59	1103	
Contractor Ca	rmack Well	Servi	се		Address	2154	Hwy	6450,	, Grand	Junction,	. co 81 <u>9</u>	505
Location NW	1/4 NW	_1/4	Sec.	18	T. 178	R.	2	5E (County_	Grand		
Water Sands												
De	<u>pth</u>			Volume				Que	lity			
From	To		Flow	Rate or	Head		:	Fresh	or Sal	ty		
1. NONE												
2		_					*					
3												
,												
5												
	(Cont	inue (n rev	ærse si	de if ne	cessa	ry)			·		
Formation Tops	_ Dal	kota Si kota Sa			3815 3904							
Remarks		rrison tl Wash	ו		4030 4364							

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
 - (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

Form 3160-4 (November 1983) (formerly 9-330)

ud	m approved. Iget Bureau I ires August	No. 3 31,	1004–0: 19 8 5	137	4
F,	DESIGNATION	AND	SERIAL,	NO.	'

DEPARTMENT	OF	THE	INTERIOR
PUDEALLOET	AND	MARIAC	CMENT

UNI D STATES	SUBMIT IN	DUPLICA (See other film-	Budget Bureau N Expires August 3
ARTMENT OF THE INTE	RIOR	structions on reverse side)	5. LEASE DESIGNATION
BUREAU OF LAND MANAGEMENT		·	U-38033
ION OR RECOMPLETION REP	SEAN	91426*	6. IF INDIAN, ALLOTTEE
OIL GAS X DRY Other	TEOL	TIA L'IS	7. UNIT AGREEMENT NAM

								· · · · · · · · · · · · · · · · ·		
WELL CO	OMPLETION	OR REC	OMPL	ETION F	REPORT	AND LE	G*	6. IF INDIAN,	ALLOTTEE (OR TRIBE NAME
1a. TYPE OF WE		ELL GA	X	DRY .	Other	OEIVE	W-	7. UNIT AGRE	EMENT NAM	E .
b. TYPE OF CO.				DIES	20	T 100	-	Winter	Camp	
WELL X	OVERE	EEP- PI BA	ra C	DIFF. RESVR.	Other <u>OC</u>	T 3 0 198	<u> </u>	8, FARM OR I	EASE NAME	
2. NAME OF OPER		UCT 1 0 11 0 0	V6 8V					Federal		
3. ADDRESS OF OF	NTAIN PRODU	JCITON CO	MPANY		الابن	SION OF	ONF	18-4		
		Petroleu	m Ruil	dina Bi	llings GA	S-8-WININ	ig	10-4 10. FIELD AN	D POOL, OR	WILDCAT
P.O. Box			d in accord	lance with any	y State requir	cments)*		Undesig	nated	
At surface	350' FWL, 9	900' FNL								OCK AND SURVEY
At top prod. i	nterval reported	below							_	
At total depth	Same							NW# NW#	Sec.18	3-T17S-R25E
	Same		14	PERMIT NO.		DATE ISSUED		12. COUNTY C) Ř 1;	3. STATE
				3-019-31	106	7/29/8	_	FARISH Grand	ļ	Utah
5. DATE SPUDDED	16. DATE T.D.	REACHED 17	DATE COM	PL. (Ready to		. ÉLEVATIONS				CASINGHEAD
9/24/85	9/30/85		10/2			541 GL,	5545 KE		5541	
20. TOTAL DEPTH, M	D & TVD 21. P	LUG, BACK T.D.,	MID & TVD	22. IF MULT HOW M	TIPLE COMPL.	, 23. IN	TERVALS	ROTARY TOO	.s c.	ABLE TOOLS
4507 24. PRODUCING INT		4131		7016 11111111111111111111111111111111111	An and musica		<u> </u>	O-TD		ONE S DIRECTIONAL
. PRODUCING INT	ERVAL(S), OF TH	IN COMPLETION-	TOP, BOT	IUM, NAME (M	AN TAN).					VEY MADE
Dakota Sa	andstone 39	904-3920	3940-	3972					l No	`
6. TYPE ELECTRIC			7770	JJ14				1	27. WAS W	
GR-FDC-C1	NL, SP-GR-I	DIL, GR-C	BL-VDL	∴a.	٠ - ١٤ / المواقعة				No)
8.				ECORD (Rep	ort all string	set in well)	,			
CASING SIZE	WEIGHT, L		H SET (M		LE SIZE		EMENTING I			OUNT PULLED
8-5/8"	24#	32		124		·		H(to su		None_
4111	10.5#	41	69	<u> </u>	8	175 sx	. thixc	otropic (<u>to 3460</u>)) None
		<u> </u>				ļ		· 3.500.00		
29.		LINER REC	ORD			30.	т	UBING RECO	RD	
ŞIZÊ	TOP (MD)	BOTTOM (M		CS CEMENT*	SCREEN (M		1	EPTH SET (M		KER SET (MD)
None		-				1 1 1	· -	4008 KB	Nc	one
31. PERFORATION R					32.			URE, CEMENT		
	ameter hole		-	•		CC 7	.	OUNT AND KIN		
2247, 22:	52, 3962, 1)90/; o n	ores to	otai.	3909-3			gallons n fractur		
					3909-39	16./				foam;20,00
										000# 20-40
13.*					DUCTION		sand			
ATE FIRST PRODUC	PRO PRO	DUCTION METH	on (Flowi	ng, gas lift, pi	um ping—size	and type of p	ump)		STATUS (Pro	-
10/12/85	HOURS TESTE	Flowing choke	SIZE F	ROD'N, FOR	OILBBI.	GAS	MCF	WATERBBL	Shut-	IL RATIO
10/23/85	26	111		EST PERIOD	0	148		0		-
LOW. TUBING PRESS	•	BURE CALCUL)II, -BBI	GAS-		WATER-		OIL GRAVIT	Y-API (CORR.)
230 psig	450 ps	ig 24-Hott	RATE	0	13	70		0		
4. DISPOSITION OF	GAB (Sold, used ,	for fuel, vented	etc.)			·	·	TEST WITNES	SED BY	
Vented								Dave T	errell	
35. LIST OF ATTAC				I				•	•	
None; log	s & Geolog								· · · · · · · · · · · · · · · · · · ·	:5
_	/	omgandattae.	iea intoff							
SIGNED 9	mas II - 1/2	moun		TITLE Pe	etroleum	Engineer	r	DATE	10/2	:5/85

	ď	TRUE VERT, DEPTH	same same same same same	
GEOLOGIC MARKERS	TOP	MEAS, DEPTH	Surface 3548 3815 3904 4030 4364	
38. GEOI		NAME	Mancos Frontier Dakota Silt Dakota Sand Morrison Salt Wash (Morrison)	
drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	DESCRIPTION, CONTENTS, ETC.	ļ	Tight gas Tight-damp with water	
lerval tested, cus	BOTTOM	000	3972 4030	
ncluding depth in	TOP	-	3998	
drill-stem, tests, i recoveries):	FORMATION		Dakota Dakota Dakota	

	UNITED STATES PARTMENT OF THE IN BUREAU OF LAND MANAGE	TERIOR (Other instruction verse side)	Budget Bureau N Expires August 5. LEASE DESIGNATION A	31, 1985
	NOTICES AND REPORT OF PROPERTY OF THE PROPERTY		6. IF INDIAN, ALLOTTEE	OR TRIBE NAME
OIL GAS TV		RECEIVED	7. UNIT AGREEMENT NAD	d E
WELL WELL X	OTHER	, ILOLI VILD	Winter Camp	
LONE MOUNTAIN PR	ODUCTION COMPANY	NOV 0 4 1985	Federal	•
, ADDRÉSS OF OPERATOR	ODOCT TOIL COLL ANT	1404 0 4 1505	9. WELL NO.	
P.O. Box 3394, 4	08 Petroleum Building,	Billings, MT 59103	18-4	
See also space 17 below.)	location clearly and in accordance wi	GAS & MINING	10. FIELD AND POOL, OR	WILDCAT
At surface		•*	Undesignated	
350' FWL, 900' F	NL, Section 18	###### · ·	11. SEC., T., B., M., OR BI SURVEY OR AREA	_
4. PERMIT NO.	15. ELEVATIONS (Show whe	other DE DT CD etc.)	NW ¹ / ₄ NW ¹ / ₄ Sec.	
43-019-31196	1	, , , , , , , , , , , , , , , , , , , ,	Grand	13. STATE Utah
	5541 GL, 5545			
^{3.} CI	heck Appropriate Box To Indic	cate Nature of Notice, Report, or	Other Data	
NOTICE	OF INTENTION TO:	SUBSE	QUENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	BEPAIRING WI	ELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTUBE TREATMENT	ALTERING CAS	SING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT	x* X
REPAIR WELL	CHANGE PLANS	-1		!!
7. DESCRIBE PROPOSED OR COMP proposed work. If well nent to this work.)	LETED OPERATIONS (Clearly state all prise directionally drilled, give subsurfac	(Note: Report result Completion or Recom- ertinent details, and give pertinent date ce locations and measured and true vert	ts of multiple completion of inpletion Report and Log form including estimated date ical depths for all markers	n.)
7. DESCRIBE PROPOSED OR COMP proposed work. If well	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
7. DESCRIBE PROPOSED OR COMP proposed work. If well nent to this work.)	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
7. DESCRIBE PROPOSED OR COMP proposed work. If well nent to this work.) •	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
DESCRIBE PROPUSED OR COMP proposed work. If well nent to this work.)	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
. DESCRIBE PROPOSED OR COMP proposed work. If well nent to this work.) *	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
7. DESCRIBE PROPOSED OR COMP proposed work. If well nent to this work.) *	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)
DESCRIBE PROPUSED OR COMP proposed work. If well nent to this work.)	is directionally drilled, give subsurfac	Completion or Recom	ipletion Report and Log form	n.)

*See Instructions on Reverse Side

DATE ___

TITLE _

(This space for Federal or State office use)

						Form approved	~ Budget Bureau	No. 1004-0138 Expi	ires August 31, 1985		
	UNITED	STAT	ES		L	ease No	u-38033				
	(Novem (Forme) ——— MONTHL	3160-6 aber 198 rly 9-32 Y REP	NAGEM (3) (29) ORT		F C C	Communitization Agreement No. Field Name Undesignated Unit Name None Participating Area None (spaced area is N½ Section County Grand State Utah Operator Lone Mountain Production Company					
	OPER.		_			Amended R	•	•	vells) for the mont		
basis fo	or recommend	port car	resulti:	J.S.C. 189, n the asses the lease or Well	30 U.S.C. ssment of I nd forfeit th	iquidated damag e bond (43 CFR *Barrels	396d), regulation es, (43 CFR 3160 3160).), penalties, shutting	ond the terms of the g down operations, or Remarks		
No. 18-4	14 of 14	170	255	Status	Prod.	of Oil	Gas	of Water			
10-4	NW1 NW1 Sec. 1	178	25E	DRG	0				•		
								RECEIV	ED		
								NOV 0 4 19	85		

DIVISION OF OIL GAS & MINING

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		xxxxxxxxxxxxxxx	XXXXXXXXXXXXXXXXX
*Produced			
*Sold			×××××××××××××××××××××××××××××××××××××××
*Spilled or Lost		×××××××××××××××××××××××××××××××××××××××	XXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXX
*Used on Lease			******
*Injected			
*Surface Pits	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	
*Other (Identify)			
*On hand, End of Month		XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
*API Gravity/BTU Content			XXXXXXXXXXXXXXXX
Authorized Signature:	Address: F	.O. Box 3394, Bill	ings, MT 59103
Title: Office Manager	•	Page of	1

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT OF OPERATIONS

Lease No	U-3	38033					
Communitiz	ation A	greem	ent No				
Field Name	<u>Undes</u>	ignate	<u>d</u>				
Unit Name _	None						- 83
Participating	g Area	None	(spaced	area	is N ₂	Section	18)
County	Grand				State	Utah	
Operator	Lone I	Mounta	in Produ	uction	Comp	any	
M Amended	Penort						

The following is a correct report of operations and production (including status of all unplugged wells) for the montrof September 1985

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & ¼ of ¼	TWP	RNG	Well _Status	Days Prod.	*Barrets of Oil	•MCF of Gas	*Barrels of Water	Remarks
18-4	NW¼ NW¼ Sec. 18	175	25E	DRG	0				
							REC	EIVED	
		i					NOV	06 1985	
							DIVIS GAS	ION OF OH & MINING	
:							,		

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate	Gas	Water
	(BBLS)	(MCF)	(BBLS)
*On hand, Start of Month		XXXXXXXXXXXXXXX	xxxxxxxxxxxxxxx
*Produced	4-14-		
*Sold			xxxxxxxxxxxxxxx
*Spilled or Lost		XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXX
*Flared or Vented	<u> </u>		xxxxxxxxxxxxxxx
*Used on Lease			XXXXXXXXXXXXXXXX
*Injected		***	
*Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	
*Other (Identify)			
*On hand, End of Month		xxxxxxxxxxxxxxx	XXXXXXXXXXXXXXX
*API Gravity/BTU Content	0-1		******
Authorized Signature: Donnue	Paul Address: F	0.0. Box 3394, Bill	ings, MT 59103
Title: Office Manager	·	Page of	

Form approved -	Budget	Bureau No.	1004-0138	Expires	August 31, 1985	

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT OF OPERATIONS

Lease No	<u>U-380</u> ;	33	****			
Communitiza	ation Agree	ement No				
Field Name_	<u>Undesigna</u>	ated				
Unit Name _	None					
Participating	AreaNor	ne (spaced	area is	N½	Section	18)
County	Grand		Stat	te .	Utah	
Operator	Lone Mour	ntain Prod	uction C	ompa	any	
M Amended						

The following is a correct report of operations and production (including status of all unplugged wells) for the month of October 19.85

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well _Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
18-4	NW¼ NW¼ Sec. 18	178	25E	GSI	0				
	,						٩E	CEIVED	
						:	NO	/ 06 1985	
į							JIVI GA:	SION OF OIL	

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		XXXXXXXXXXXXXXXX	******
*Produced			
*Sold			XXXXXXXXXXXXXXXX
*Spilled or Lost		XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXX
*Used on Lease			XXXXXXXXXXXXXXXX
*Injected			
*Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	
*Other (Identify)		·	
*On hand, End of Month		XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXX
*API Gravity/BTU Content) _4		XXXXXXXXXXXXXXXX
Authorized Signature: Donne To Title: Office Manager		Page 1 of	

LONE MOUNTAIN PRODUCTION COMPANY

P.O. Box 3394 408 Petroleum Building Billings, Montana 59103-3394 (406) 245-5077



DIVISION OF OF

November 4, 1985

Division of Oil, Gas, & Mining 4241 State Office Bldg. Salt Lake City, UT 84114

> Re: Federal No. 18-4 Well Lease No. U-38033 Winter Camp Unit

> > NW_{4}^{1} NW_{4}^{1} Section 18-T17S-R25E

Grand County, UT

Gentlemen:

The above captioned well is a "tight hole". Please place it on "confidential" status.

Thank you.

Very truly yours,

LONE MOUNTAIN PRODUCTION COMPANY

Thomas M. Hauptman

TMH:bp

Form 3160-5 (November 1983) (Formerly 9-331)	UNIOD DEPARTMENTOF BUREAU OF LAN	THE INTERIC	SUBMIT IN TRIPI (Other instructions) R verse side)		No. 1004-01:5 31, 1985
	ORY NOTICES AN orm for proposals to drill o Use "APPLICATION FOR P			6. IF INDIAN, ALLOTTE	OR TRIBE NAME
OIL GAS WELL C. NAME OF OPERATOR	OTHER		DEC 0 5 1985	7. UNIT AGREEMENT NA Winter Camp 8. PARM OR LEASE NAM	
LONE MOUNTAIN 3. ADDRESS OF OPERATOR P.O. Box 3394, 4. Location of well (Rej See also space 17 below At surface	PRODUCTION COMPAI 408 Petroleum B port location clearly and in FNL, Section 18	ldg., Billings	DIVISION OF O L. MTG \$ 3 MINING	Federal 9. WHILE NO. 18-4 10. FIELD AND POOL, OI Undesignated 11. SEC., T., E., M., OR B SURVET OR ARMA	R WILDCAT
14. PERMIT NO. 43-019-31196	!	ONS (Show whether DF, R	T, CR, etc.)	NW4 NW4 Sec. 12. COUNTY OR PARISH Grand	•
16.	Check Appropriate E	lox To Indicate Na	ture of Notice, Report, or (Other Data	
proposed work. If we nent to this work.)	MULTIPLE COM ABANDON* CHANGE FLANS	PLETE	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) Status Rep (Note: Report result Completion or Recompletion or Recompletion or Recompletion and give pertinent dates and measured and true vertices.	s of multiple completion obligation Report and Log for	on Well
·					
18. I hereby certify that th	ne foregoing is true and cor			10.4	0.495
SIGNED James G. (This space for Federal	Routson I or State office use)	TITLE Petr	oleum Engineer		2/85
APPROVED BY	ROVAL, IF ANY:	TITLE		DATE	

November 1983) UNITED STATES SUBMIT IN TRIPLICATE* (Other Instructions of re-	Budget Bureau No. 1004-0135 Expires August 31, 1985 5. LEASE DESIGNATION AND SERIAL NO
BUREAU OF LAND MANAGEMENT	U-38033
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1.	7. UNIT AGREEMENT NAME
OIL CAS COTHER	Winter Camp
2. NAME OF OPERATOR	S. FARM OR LEASE NAME
LONE MOUNTAIN PRODUCTION COMPANY	Federal
3. ADDRESS OF OPERATOR	9. WELL NO.
P.O. Box 3394, 408 Petroleum Building, Billings, MT 59103	18-4
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)	10. FIELD AND POOL, OR WILDCAT
At surface	Undesignated
350' FWL, 900' FNL, Section 18	11. SBC., T., R., M., OR BLK. AND SURVEY OR AREA
	NW4 NW4 Sec. 18-T17S-R25E
14. FERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
43-019-31196 5541 GL, 5545 KB	Grand Utah
16. Check Appropriate Box To Indicate Nature of Notice, Report, or C	Other Data
	ENT REPORT OF:
	7
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	BEPAIRING WELL
FRACTURE TREAT NULTIPLE COMPLETE FRACTURE TREATMENT	ALTERING CASING
REPAIR WELL CHANGE PLANS (Other) Status Report	ABANDONMENT*
(NorE: Report results	of multiple completion on Well etion Report and Log form.)
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical near to this work.)* Shut in Waiting on pipeline.	d depths for all markers and zones perti-
RECEIVE	D
JAN 06 198	6
BIVIDION OF	
18. I hereby cornify that the foregoing is true and correct	7-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
SIGNED James D. Janton Petroleum Engineer	DATE 1/3/86
/ James G. Routson	
(This space for Federal or State office use)	
APPROVED BY	DATE

Ferm 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES MENT F THE INTERIOR (Other Instructions verse state) 18061

	Exp		August			
. 1	LEASE	DESI	GNATION	AND	BERIAL	N.

LEASE	DESIG	NATION	AND	BERIAL	No.
Expi	res	August	31,	1985	
		MILCORY			11 . 3

Budget Bureau No.	1004-0135
Expires August 31,	1985
ARE DESIGNATION AND	BERIAL NO

	REAU OF LAND MANAGEMEN	1 000011	1 0-38033	
(Do not use this form for	OTICES AND REPORTS (proposals to defill or to deepen or plug to pulication for permit—" for such p	back to a different reservoir.	G. IF INDIAN, ALLOTTE	E OR TEIBE NAME
OIL GAS COTH	ER .		7. UNIT AGREEMENT NA Winter Camp	ME
. NAME OF OPERATOR			8. FARM OR LEASE NAM	(E
LONE MOUNTAIN PROD	UCTION COMPANY		Federal	
ADDRESS OF OPERATOR			9. WELL NO.	
P.O. Box 3394, 408	Petroleum Building, Bil	llinas. MT 59103	18-4	
	tion clearly and in accordance with any		10. FIELD AND POOL, O	R WILDCAT
350' FWL, 900' FNL	, Section 18		11. SEC., T., B., M., OR I SURVEY OR AREA NW14 NW14 Sec.	r.
4. PERMIT NO.	15. ELEVATIONS (Show whether or	, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
43-019-31196	5541 GL, 5545 KB		Grand	Utah
	k Appropriate Box To Indicate N	lature of Notice, Report, or (Other Data	
NOTICE OF	INTENTION TO:	53855	UENT REPORT OF:	
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON*	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	REPAIRING & ALTERING CA	ASING
REPAIR WELL	CHANGE PLANS	(Other) Status Repo	<u>rt </u>	

(Other)

(Note: Report results of multiple completion on Well

(Note: Report results of multiple completion on Well

(Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Shut in -- Waiting on pipeline.

RECEIVED

AUG 04 1986

TIO 40 MOIGINIC GAS & MINING

SIGNED James G. Routson	ritte Petroleum Engineer	7/31/86
(This space 16) Federal or State office use)		
APPROVED BY	TITLE	DATE

Ferm 3160-5 (November 1983) (Formerly 9-331)

SUBMIT IN TRIPLIC (Other instructions

Budget Bureser No. 1004-0135 Expires August 31, 1985 LEASE DESIGNATION AND SERIAL NO.

ALL THE HATELLON	Verse West of the	o. Coase Designation
BUREAU OF LAND MANAGEMENT		U-38033
		R IN THOMAS ALLOWER

В	UREAU OF LAND MANAGEMENT	COOOLI	U-38033	
	NOTICES AND REPORTS C proposals to drill or to deepen or plug be PPLICATION FOR PERMIT—" for such pro		6. IF INDIAN, ALLOTTE	E OR TRIBE NAME
			7. UNIT AGREEMENT N	AME
WELL GAS WELL OT	HER		Winter Camp	
NAME OF OPERATOR		· · · · · · · · · · · · · · · · · · ·	8. FARM OR LEASE NAI	ME
LONE MOUNTAIN PRO	DUCTION COMPANY		Federal	
ADDRESS OF OPERATOR			9. WELL NO.	
P.O. Box 3394, 40	8 Petroleum Building, Bil	lings, MT 59103	18-4	
	ation clearly and in accordance with any S		10. FIELD AND POST, O	R WILDCAT
350' FWL, 900' FN	L, Section 18		11. SEC., T., B., M., OR I	
			NW1 NW1 Sec.	
4. PERMIT NO.	15. ELEVATIONS (Show whether DF,	RT, GR, etc.)	12. COUNTY OR PARISE	13. STATE
43-019-31196	5541 GL, 5545 KB		Grand	Utah
6. Che	ck Appropriate Box To Indicate No	ature of Notice, Report, or (Other Data	
Notice of	INTENTION TO:	subseq	DENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING V	WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING C	ASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONME	
REPAIR WELL	CHANGE PLANS	(Other) Status Repo		<u> </u>
(Other)		(NOTE: Report results Completion or Recomp	s of multiple completion letion Report and Log for	on Well rm.)
 DESCRIBE PROPOSED OR COMPLE' proposed work. If well is nent to this work.) 	TED OPERATIONS (Clearly state all pertinent directionally drilled, give subsurface location	details, and give pertinent dates ons and measured and true vertice	, including estimated dat al depths for all marker	e of starting any s and zones perti-

Shut in -- Waiting on pipeline.

RECEIVED

AUG 04 1986

110 40 MOIGINIC GAS & MINING

18.	signed James G. Routson	TITLE Petroleum Engineer	DATE	7/31/86
==-:	(This space to Federal or State office use)			
	APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	TITLE	DATE	

Form 3160-5 (November 1983) (Formerly 9-331)	UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAGE	ITERIOR TOTHER	t in TRIPLICATE red	Budget Bureau II Expires August ; 5. Léabe désignation à U-38033	11, 1985 NO BERIAL NO
(Do not use this	IDRY NOTICES AND REPORT FOR THE PROPERTY OF TH	RTS ON WELL or plug back to a diffe or auch proposals.)	LS rent reservoir.	6. IF INDIAN, ALLOTTEE 7. UNIT AGREEMENT NAS	
OIL GAR WELL	OTHER .			Winter Camp	
—	IN PRODUCTION COMPANY		A LAVIA WALLES	Federal	
P.O. Box 33	94, 408 Petroleum Building	, Billings, b	T 59103	18-4	
4. LOCATION OF WELL (See also space 17 be At surface	Report location clearly and in accordance w low.)	ith any State requires	ments.*	10. FIELD AND POOL, OR	WILDCAT
350' FWL, 9	00' FNL, Section 18			NW4 NW4 Sec.	
14. PERMIT NO.	15. ELEVATIONS (Show w	hether DF, RT, OR, etc.)		12. COUNTY OR PARISI	13. STATE
43-019-3119	6 5541 GL, 554	15 KB		Grand	Utah
16.	Check Appropriate Box To Ind	icale Nature of N	otice, Report, or C	Other Data	
	NOTICE OF INTENTION TO:	1	វិទ្ធភិគិបន	ENT EMPORT OF:	

NOTICE OF INTENTION TO:		SUBSEQUENT ESPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING FRACTURE TREAT MULTIPLE COMPLETE ABANDON* REFAIR WELL CHANGE PLANS		WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other)
(Other) Notice of first delivery	[X]	(Nork: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and sones pertinent to this work.) *

First delivered to Northwest Pipeline 9/11/86 at 11:00 A.M. Verbal notification phoned to Steve Jones, BLM, Moab District Office at 4:15 P.M. on 9/11/86.



DIVISION OF OIL. GAS & MINING

8IGNED Ames G. Routson (This space for Federal or State office use)	Petroleum Engineer	рати 9/12/86
(This space for Federal or State office use)		1
APPROVED BY	TITLE	DATE

Lone Mourtain Production Company

P.O. Box 3394 • 408 Petroleum Building • Billings, Montana 59103-3394 (406) 245-5077

July 9, 1985

TECENT

Bureau of Land Management Moab District Office P.O. Box 970 Moab, Utah 84532

JUL 1 1 1985

DIVISION OF OIL GAS & MINING

Gentlemen:

Enclosed please find original and three copies of an APD covering the drilling of our Federal No. 18-4 well in Grand County, Utah for your approval.

Yours very truly,

Lone Mountain Production Co.

James G. Routson Petroleum Engineer

cc: Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Mr. Ken Currey P.O. Box 1491 Fruita, Colorado 81521 Form 3160-3 (November 1983)

UNITED STATES

SUBMIT IN TRIP (Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

(formerly 9-331C) DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT U-38033 6. IF INDIAN. ALLOTTED OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7 DEST AGREEMENT NAME PLUG BACK DRILL [DEEPEN . WINTER CAMP UNIT h. TYPE OF WELL MULTIPLE | SINGLE ZONE ARM OR LEASE NAME WELL X WELL OTHER QUINOCO 2. NAME OF OPERATOR Federal 9. WELL NO. Lone Mountain Production Company 18 - 43 ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT P.O. Box 3394 Billings Montana 5910 and 4. LOCATION OF WELL (Report location clearly and in accordance with any State of the content of the c Undesignated 11. SEC., T., R., M., OR BLK. At surince 350'FWL, 900'FNL At proposed prod. zone JUL 1 1 **1985** NW1NW1 18-17S-25E same 12. COUNTY OR PARISH | 13. STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 miles northwest of Mack, Colorado DIVISION OF OIL

10. DISTANCE FROM PROPOSED*

10. DISTANCE FROM PROPOSED*

10. NO. OF ACRES ASSIGNED

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

2501

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2501

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2501 Utah 20. ROTARY OR CABLE TOOLS 952.94 19. PROPOSED DEPTE 350' (Also to nearest drlg. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 45001 Rotary
22. APPROX. DATE WORK WILL START* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>September 11, 1985</u> 5541 GL, 5553 KB $\overline{23}$. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SETTING DEPTH WEIGHT PER FOOT RIZE OF CASING SIZE OF HOLE 175 sacks: Class "G" (to surface 24# H-40 STC 300 ' 8-5/8" new 12 - 1/4"175 sacks RFC 4-1/2" new. 10.5# J-55 ITC 4500' 7**-**7/8" 1. Surface formation is the Mancos. 2. Anticipated geologic markers are: Frontier 3580', Dakota 3883', Morrison 4068', Salt Wash 4383'. 3. Gas is anticipated in the Dakota, Morrison and in the Salt Wash. No oil or other minerals are anticipated. No water sands are expected. 4. Proposed casing program: See Item No. 23 above. 5. Pressure control equipment: See attached well control plan and schematic of drilling contractor's BOP stack, BOP's will be tested before drilling out from under surface casing and checked daily. 6. Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered, chemical-gel type mud will be used, The well will be air drilled from under surface casing to total depth. 7. Auxiliary equipment: See well control plan. (continued on page 2) IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. 24. July 9, <u>19</u>85 Petroleum Engineer SIGNED (This space for Federal or State office use) APPROVAL DATE PERMIT NO. OF UTAH DIVISION OF OIL, GAS, AND MINING APPROVED BY CONDITIONS OF APPROVAL, IF ANY: DATE:

Application for Permit to Drill, Deepen, or Plug Back 18-4 NW $\frac{1}{2}$ NW $\frac{1}{4}$ Section 18-T17S-R 25E Grand County, Utah Lease U-38033

Page 2

- 8. The logging program will consist of a DIL log from TD to base of surface casing, and GR-FDC-CNL logs from TD to above the Frontier. No cores or DST's are planned.
- 9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
- 10. Anticipated spud date is September 11, 1985. Completion operations should commence within 30 days of rig release.
- 11. Survey plats are attached.
- 12. The gas is dedicated to Southwest Gas Company.
- 13. The spacing unit will be the N_2^1 of Section 18.
- 14. Designation of Operator forms from Quinoco will be sent to the BLM in Moab, Utah.
- 15. The well will be drilled under Quinoco's bond.

AVEYED 5-22-85 ENERGY 715 HORIZON DRIVE, SUITE 330 BCALE 1" . 1000"

DRAWN 6-1-85 SURVEYS & ENGINEERING CORP.

715 HORIZON DRIVE, SUITE 330 GRAND JUNCTION, CO 81501 (303) 245 - 7221

JOB NO. SHEET OF

Lone Mountain Production Company Federal No. 18-4 WELL CONTROL PLAN

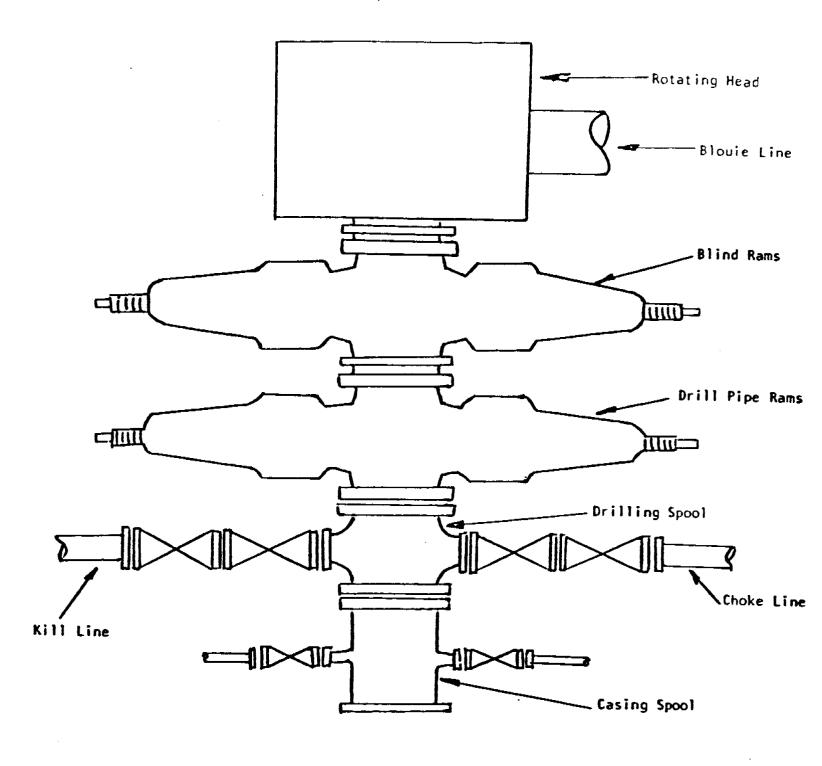
- 1. Surface Casing: 8-5/8" O.D., 24#/ft., Grade H-40,ST&C, set at 300° or deeper, cemented with pump and plug method back to the surface or bottom of cellar.
- 2. Casinghead Flange: $8-5/8'' \times 8''-900$ Series casinghead with two 2'' 2000 psi L.P. outlets.
- 3. Intermediate Casing: None
- 4. Blowout Preventor: An 8" 3000 psig W.P. double gate hydraulic shaffer BOP (or equivalent) with drill rams and blind rams. All fill, kill and choke lines will be minimium of 2" 2000 psi W.P. A Grant rotating head will be used while air and mist drilling. BOP's will be worked daily. Blind rams will be checked during trips. BOP's will be tested to 1000 psi prior to drilling shoe joint on surface casing.
- 5. Auxiliary Equipment: (a) Drill pipe floots will be allowed at contractor's discretion. (b) Visual monitoring of air returns will be maintained. (c) Upper kelly cock will be used. (d) Stabbing valve will be kept on floor.
- 6. Anticipated bottom hole pressure is less than 1200 psi at 3883 or a gradient of 309 psi/ft or less. No abnormal temperatures or hydrogen sulfide gas are anticipated.

James G. Routson
Petroleum Engineer

SCILL BITTE OF BUT STACK

Air drilled wells using 900 series wellhead equipment.

Interval from 300' to total depth.



SURFACE USE PROGRAM

Lone Mountain Production Company Federal #18-4 NW1NW1, Sec.18-T17S-R25E, S.L.M. Grand County, Utah

Existing Roads

See Vicinity Map, Topo and Access Map and Plat #1. This proposed well is located approximately 20 air miles northwest of Mack, Colorado. It is reached by going west of Mack on Old Highway 6850 3.5 miles west of the Colorado-Utah border. Turn right and go 5.6 miles to the "T" intersection. Turn right and go 2.7 miles north to the "Y", turn right and go 1.3 miles; turn left (main road) and go 4.0 miles up San Arroyo Canyon. All of the existing roads use for access are county roads. Lone Mountain will share maintenance on those graver/dirt roads with Grand County and the other oil and gas operators in the area. The existing roads are colored green on the reference map.

2. Access Roads to be Constructed and Reconstructed

The 100' of new access road will be incorporated into the Northwest end of the well pad. The width will be 20 feet.

3. Location of Existing Wells

See Map #3. There are 3 producing wells and 2 abandoned wells within 1 mile of the proposed location.

4. Location of Production Facilities

a) On Well Pad. See Plat #4. (Paint everything dark green)

5. Location and Type of Water Supply

The water source for this well is West Salt Creek. The pickup point is on Old Highway 6850 about 2.5 miles west of Mack, Colorado. The water will be hauled over the well access road.

6. Source of Construction Materials

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside material will be brought in.

7. Methods for Handling Waste Disposal

Cuttings will be buried in the reserve pit at clean up. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary land fill. Human waste will be disposed of in chemically treated sanitary pits.

Drilling fluids will be contained in the reserve pit and left to evaporate. Any fluids produced during testing operations will be collected in a test tank. If a test tank is not available, the

7. (continued)

fluids will be contained in the reserve pit. Any spills of oil, gas, salt water or noxious fluid will be cleaned up and removed.

If the well is productive, produced water will be disposed of on site for 30 days only, or 90 days with the permission of the District Manager. After that time, application will be made for approval of permanent disposal method in compliance with old MMS Order NTL-2B, and the rules and regulations of the State of Utah.

8. Ancillary facilities:

No ancillary facilities are planned.

9. Wellsite Layout

See Plat #2 - Pit and Pad Layout See Plat #2A - Cross Sections of Pit and Pad See Plat #3 - Rig Layout

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and fracturing equipment.

The location construction will begin by stripping and stockpiling all available (4-6") topsoil. The stockpile will be along the north uphill edge of the location.

The reserve pit will be constructed along the north side of the well pad. The pit will be fenced on three sides during drilling and closed on the fourth side at rig release. The fence will be maintained through completion and while the pit area is drying.

10. Plans for Reclamation of the Surface

If the well is productive, the reserve pit will be allowed to dry and then backfilled. All of the area not necessary for production will be resloped, covered with available topsoil and revegatated using a seed formula supplied by the BLM.

If the well is abandoned, the entire area of disturbance will be returned to a reasonable contour approximating the topography of the surrounding area. The topsoil will be distributed over the recontoured area and revegetated using the approporate seed formula.

Clean-up will begin after completion rig release and resloping should be completed by the Fall of 1985.

11. Surface Ownership

All lands involving new construction are Federal lands.

<u>Surface Use Program - Page 3</u>

12. Other Information

The well site is in the bottom of San Arroyo Canyon on a bench. The vegetation is sparce and includes juniper, sagebrush, western wheatgrass, Indian rice grass and a few annual plants.

13. Lessee's or Operator's Representatives and Certification

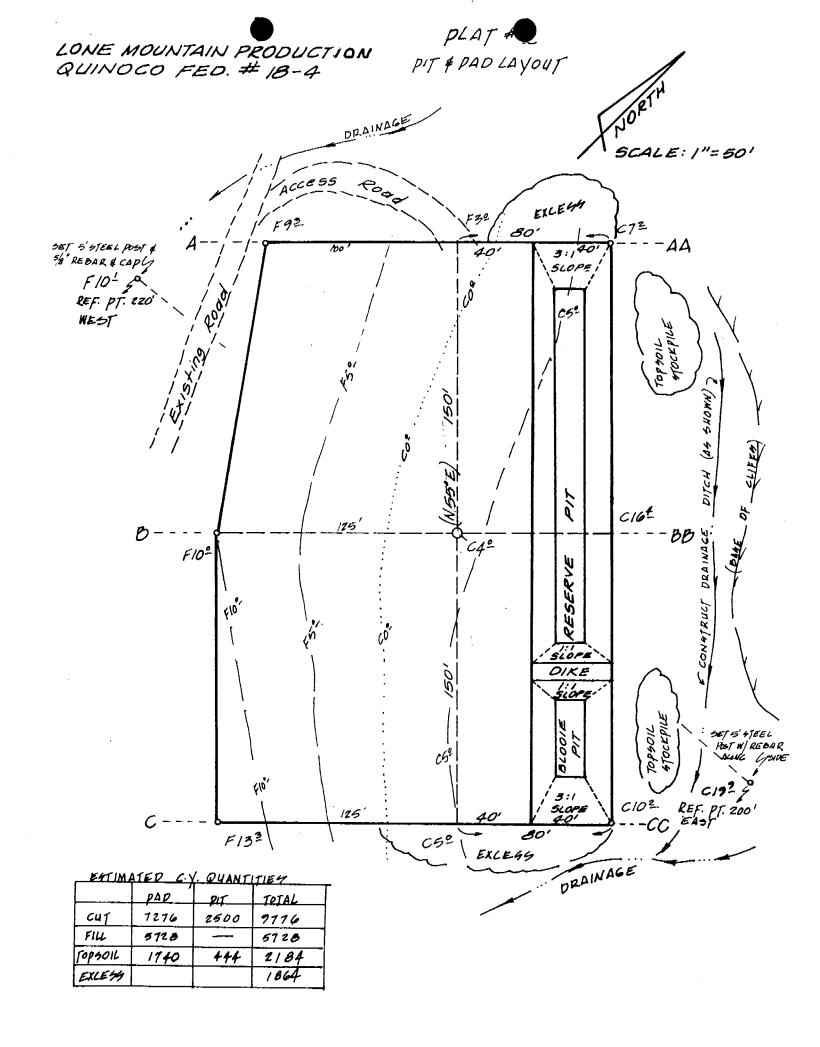
James G. Routson Lone Mountain Production Co. P.O. Box 3394 Billings, Montana 59103 Office Phone: 406-245-5077 Home Phone: 406-245-8797

Ken Currey
Field Consultant
P.O. Box 1491
Fruita, Colorado 81521
Office/Home: 303-858-3257
Mobile: 303-245-3660,Unit 5858

I hereby certify that I, or persons under my supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Lone Mountain Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

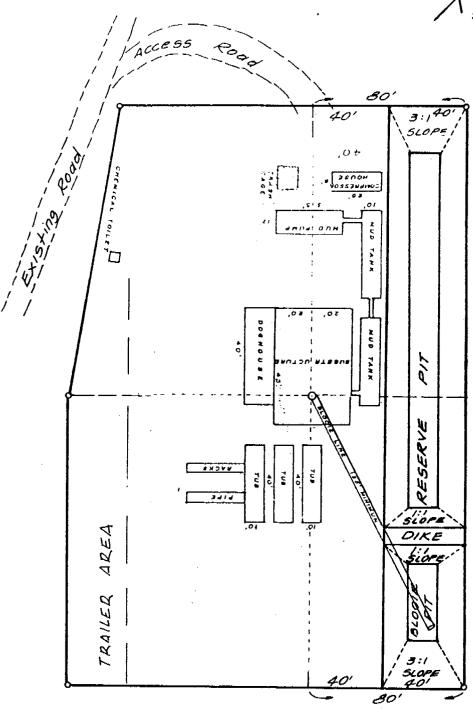
July 9, 1785

James &-Routson

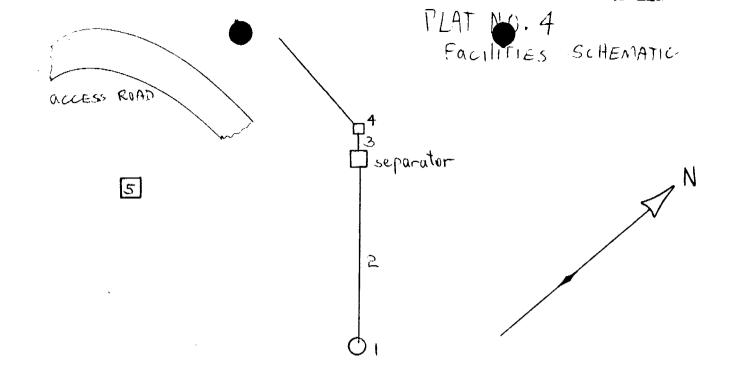


LONE MOUNTAIN PED. QUINOCO FEO. # 18-4 PLAT #3 RIG LAYOUT

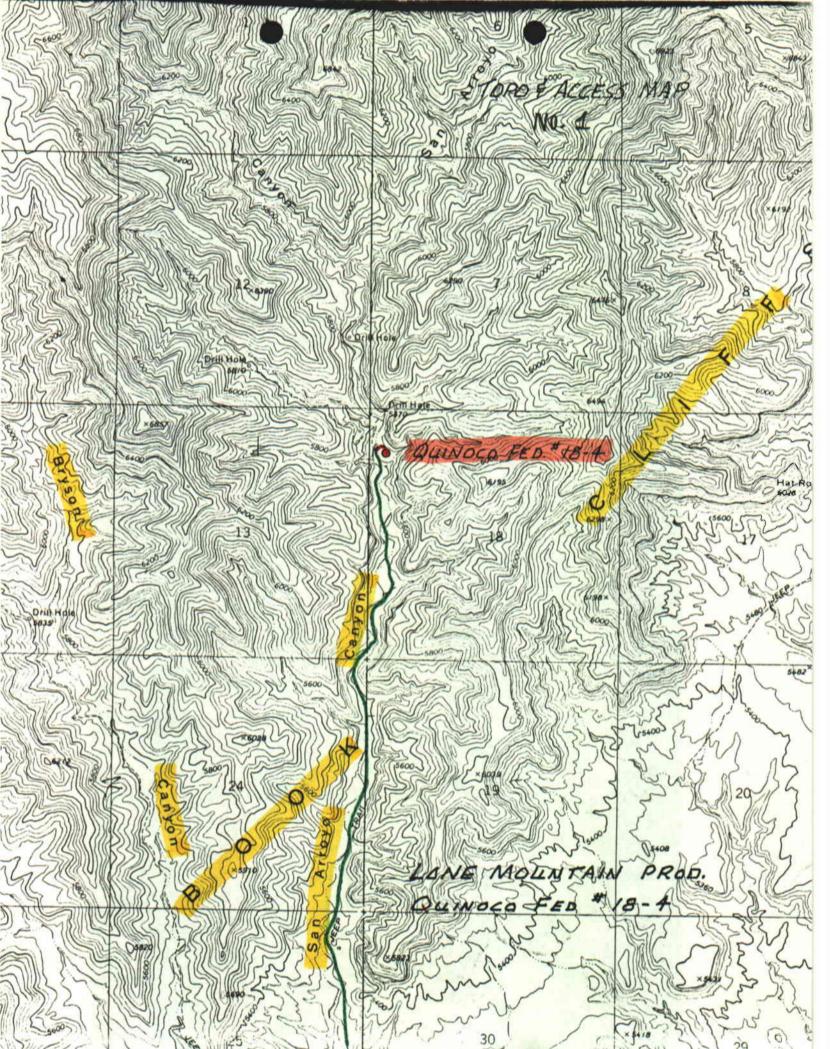
10PTH 5CALE: 1"= 50'

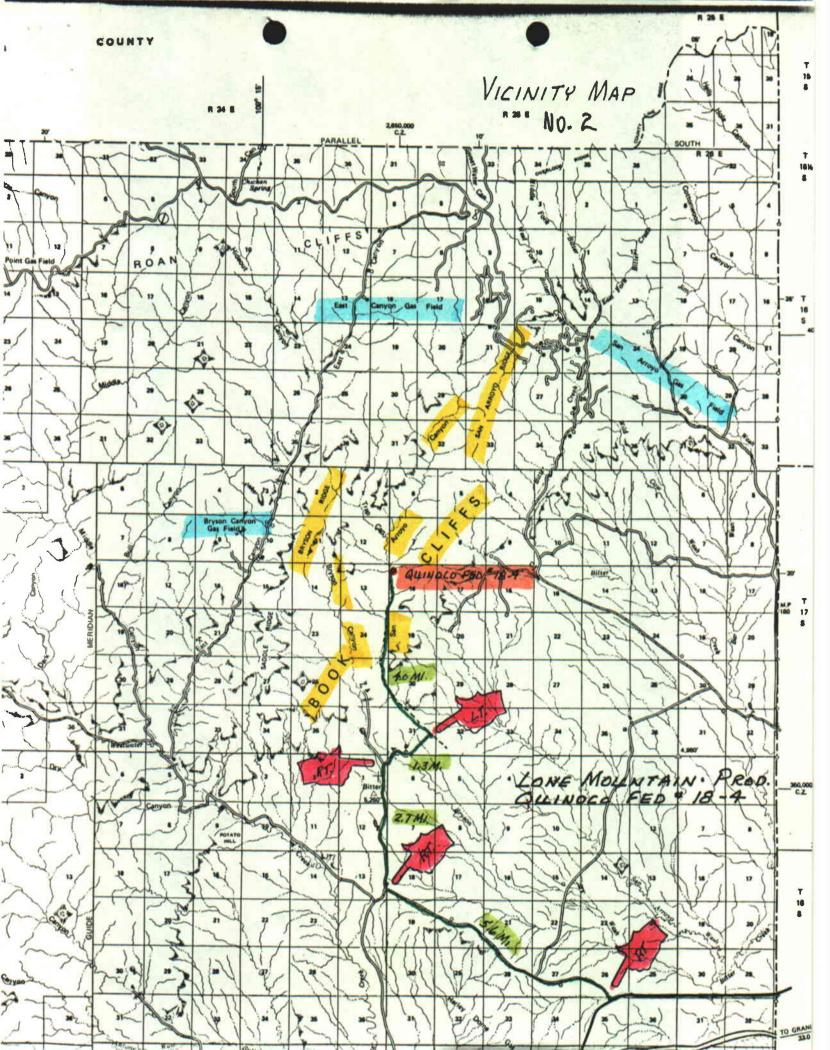


LONE MOUNTAIN PRODUCTION QUINOCO FED. # 18-4 LOC.



- 1. Wellhead will be an 8-5/8" Larkin Fig. 92 or equivalent. Tubing head will be a 41/2" x 6"-900 Series with two 2" 3000 psi screwed valves. Tree will be 2" screwed x 2000 psi W.P.
- 2. Line between wellhead and separator will be approximately 100 feet in length and constructed of 2-3/8" .218 wall seamless, welded, wrapped and buried approximately 5 feet deep.
- Line between separator and meter will be 4" or 4.028 OD seamless, welded, coated, wrapped and buried, and will be approximately 25 feet in length.
- 4. Meter run will be American 2" run, or equivalent, 1000 psi static rating, 100" of water differential rating.
- 5. Pit will be 10'x 10', enclosed by dikes and fenced.

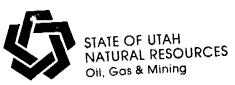




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OPERATOR Low Mountain	· Production Co.	DATE 7-16-85
WELL/NAME Tesleral 18-4		
SEC NWNW 18 T 175	R 25E COUNTY 5	Grand
43-019- 3/196 API NUMBER	Les Contractions of the Contraction of the Contract	
CHECK OFF:		
PLAT	BOND	NEAREST WELL
LEASE	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS:	00	
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Designation from Buston	Harrock Operator Wis	ter Cours Unit)
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APPROVAL LETTER:		
SPACING: A-3 Winter Coams	c-3-a	CAUSE NO. & DATE
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STIPULATIONS: Compution from	Biston Hancock	
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Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 29, 1985

Lone Mountain Production Company P. O. Box 3394 Billings, Montana 59103

Gentlemen:

Re: Well No. Quinoco Federal 18-4 - NW NW Sec. 18, T. 17S, R. 25E 900' FNL, 350' FWL - Grand County, Utah

Approval to drill the above-referenced gas well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

In addition, the following actions are necessary to fully comply with this approval:

- Spudding notification to the Division within 24 hours after drilling operations commence.
- Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
- 4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31196.

Sincerely,

Associate Director, Oil & Gas

as

Enclosures

cc: Branch of Fluid Minerals

Form 3160-3

SUBMIT IN TRIPLICA

Form approved.

(November 1983) (formerly 9-331C)	UNIT	TED STATES	reverse (Utber inst		Expires August	31, 1985
		EOF EHS INT	ERIOR		5. LEASE DESIGNATION	AND SERIAL NO.
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(Also to nearest drig	g. unit line, if any) 3	50'	952.94	20 2004	317.74	·
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zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive

2 3 AUG 1985

APPROVED BY S C. WELLING BACKUS CONDITIONS OF APPROVAL, IF ANY;

DISTRICT MANAGER

THE HONS OF APPROVAL ATTACHED

Lone Mountain Production Company Well No. Wintercamp Unit Federal 18-4 Sec. 18, T. 17 S., R. 25 E. Grand County, Utah Lease U-38033

CONDITIONS OF APPROVAL

A. DRILLING PROGRAM

A backup source capable of closing the B.O.P.'s in case of a primary source failure will be available.

All pressure tests on the B.O.P.E. will be recorded in the driller's log.

Both casing strings will be tested to at least 1000 psi. This will be recorded in the driller's log.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Office. If operations are to be suspended, prior approval of the District Office will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the Area Office within a minimum of 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Order No. 1 this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continued each month until the well is plugged and abandoned. This report will be sent to the District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: 'Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Area Office in accordance with requirements of NTL-3A.

If a replacement rig is needed for completion operations, A Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations verbal approval to bring on a replacement rig will be approved through the District Office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

If the well is to be completed for production the Area Office is to be contacted in order to set up a pre-production conference. When the well is placed in a producing status the District Office is to be notified by telegram or other written communication within five working days.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

No well abandonment operations will be commenced without the prior approval of the District Office. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Office. A Subsequent Report of Abandonment (Form 3160-5) will be sent to the District Office within 30 days following completion of the well for abandoment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Office, or the appropriate surface managing agency. Upon completion of approved plugging, a dry hole marker will be erected in accordance with 43 CFR 3162.6. The top of the marker will be closed or capped. The following minimum information will be permanently placed on the marker; "Fed" or "Ind", as applicable, "Lease number", "Well number", location of well by 1/41/4 section, township, and range.

B. SURFACE USE PROGRAM

The operator will contact the Grand Resource Area at (801) 259-8193, forty-eight (48) hours prior to beginning any dirt work on this location.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling of the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

Immediately upon completion of drilling, the location, and <u>surrounding areas will be cleared of all remaining debris, materials, trash, and junk not required for production.</u>

Produced waste water will be confined to a pit.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

The operator or his contractor will notify the Grand Resource Area at (801) 259-8193 forty-eight (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

The following seed mixture will be used:

•					
Species			lbs/acre		
Grasses					
Sporobolus cryptandrus Hilaria jamesii Agropyron smithii	Sand dropsee Galleta (Cur Western whea	1 1			
Forbs					
Melilotus officinalis Helianthus annuus	Yellow sweet Common sunfl		1/2 1/2		
Shrubs					
Eurotia lanata Atriplex canescens	Ninterfat (W Fourwing sal	1			
			6 lbs/acre		
Broadcast seed will be applie	ed at double	the above rate.			
Final location release will successful (when perennial v			hown to be		
Your contact with the Distri	ct Office is:				
Greg Noble , Petroleum	Engineer	Office Phone: (80	1)259-6111		
		Home Phone:			
Distric	t Address:				
	ood, P.O. Box Jtah 84532	970			
	Your contact Area Office	with the Grand Re is:	source		
Jeff Robbins		Office Phone: (80	1)259-8193		
		Home Phone: (801)	259-7964		

Area Office Address:

Sand Flats Road, P.O. Box M Moab, Utah 84532

DIVISION OF OIL, GAS AND MINING

	SPUDDING INFORMATIO	API #43-019-31196	
NAME OF COMPANY: Lond	e Mountain Producti	on Company	
WELL NAME: Qui	noco Federal 18 -4		
SECTION NW NW 18 TOWNSHIP	17S RANGE 2	5E COUNTY Grand	
DRILLING CONTRACTOR	Carmack Well Serv	ice	
RIG #_20			
SPUDDED: DATE 9-24-85			
TIME 12:30 PM			
HOW Rotary			
DRILLING WILL COMMENCE			
REPORTED BY Bonnie Paul			
TELEPHONE # (406) 245-5	077		
DATE 9-25-85	SIG	GNEDs	

SPUDDING INFORMATION

OGCC FORM 4

OIL AND GAS CONSERVATION COMMISSION

2

DEPARTMENT OF NATURAL RESOURCES

File in	THE STATE OF COLORADO duplicate for Patented and Federal 1		5. LEASE DESIGNATION AND SERIAL NO.
	OTICES AND REPORTS O	N WELLS	U-38033 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
(Do not use this form for p Use "APP	roposals to drill or to deepen or plug ba	ck to a different reservoir.	
I. OIL □ CAS 「▼		HECFINED	7. UNIT AGREEMENT NAME
WELL WELL OTH	er		Wintercamp
2. NAME OF OPERATOR		07 1095	8. FARM OR LEASE NAME
Lone Mountain Pro	duction Company	SEP 27 1985	Federal
ADDRESS OF OPERATOR			9. WELL NO.
P.O. Box 3394, Bi	11ings, Montana 59103 ion clearly and in accordance with any S	DIVISION OF OIL	18-4
See also space 17 below.)	ion clearly and in accordance with any S	GAS & MINING	10. FIELD AND POOL, OR WILDCAT
At surface		<u> </u>	Undesignated
At proposed prod. zone	350' FWL, 900' FNL		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
			NW4 NW4 18-17S 25 E
14. PERMIT NO. API #43 019 31196	15. ELEVATIONS (Show whether DF, 5541 GL, 5553 KB	RT, GR, etc.)	12. COUNTY 13. STATE Utah
Check	Appropriate Box To Indicate No		
NOTICE OF	INTENTION TO:	SUBBE	QUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDON	SHOOTING OR ACIDIZING	ABANDONMENT
REPAIR WELL	CHANGE PLANS	(Other) Spud	
(Other)		(NOTE: Report resur Completion or Recom	ts of multiple completion on Well pletion Report and Log form.)
Spudded 12≟'' ho	le at 12:30 P.M. 9/24/85	. Carmack Well Ser	vice Rig No. 20.
18. I hereby certify that the force SIGNED (This space for Federal or Sta	A Daughan TIPLE	President	9/25/85
APPROVED BY	, IF ANY:		DATE

(N. 1	UNITED STATES THE OF THE INT EAU SLAND MANAGEM		5. LEASE DESIGNATION A	SI, 1983 NO BERIAL ST
	TICES AND REPORT	S Of WELLS lug book to a different reservoir.	3. IF INDIAN, ALLOTTEZ	OR TRUE NAME
OLC GAS X OTHER WELL TELL X OTHER 2. NAME OF OPERATOR		HECEIVED	7. UNIT AGREEMENT NAS Wintercamp 8. FARM OR LEASE NAME	
Lone Mountain Product	ion Company	OCT 07 1985	Federal	
P.O. Box 3394, Billir DOCATION OF WELL (Report location See also space 17 below.) At surface	ngs, Montana a clearly and in accordance with	SAS & MINING	18-4 10. FIELD AND POOL, OR Undesignated	WILDCAT
350' FWL, 900' FNL	-		11. SEC., T., E., M., OR BE SURVEY OR AREA NW4 NW4 Sec.	
14. PERMIT NO. API #43 019 31196	15. ELEVATIONS (Show wheth		12. COUNTY OR PARISH	
		ie Nature of Notice, Report, o		
NOTICE OF INT	r		SEQUENT REPORT OF:	
FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON®	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CAS	BING
(Other) 17. DESCRIBE PROPOSED OR COMPLETED C proposed work. If well is directed to this work.)*	CHANGE PLANS DEFERATIONS (Clearly state all peritionally drilled, give subsurface		sults of multiple completion or our letton Report and Log form	
KB corrected from pr Drilled 12¼" hole to Class H, 3% CaCl ₂ .	330'. Ran 8 - 5/8",	24#, J-55 casing to to surface.	329'. Cemented wi	th 175 sx
Drilled 7-7/8" hole Cemented with 175 sx	to 4507'. Ran $4\frac{1}{2}$ '', Thixotropic cement	10.5#, J-55 casing to . Rig released 2:00	4169'. PBTD 4131 P.M. 10/1/85.	١,
Will move in complet	ion rig about 10/15	/85		
Log Tops:	Dakota Silt Dakota Sand Morrison Salt Wash	3815 3904 4030 4364		LE C
S. I hereby certify that the foregoing SIGNED Queen D-RW	2	Petroleum Engineer	DATE 10/2	/85
(This space for Federal or State of	flice use)			
APPROVED BY CONDITIONS OF APPROVAL, IF			DATE	

RECEIVED

OCT 07 1985

DIVISION OF OIL GAS & MINING

FEDERAL NO. 18-4

NW/NW SECTION 18, T17S, R25E

GRAND COUNTY, UTAH

GEOLOGIC REPORT

BY

BILL NAGEL

ROCKY MOUNTAIN GEO-ENGINEERING COMPANY

WELL SUMMARY

OPERATOR:

LONE MOUNTAIN PRODUCTION COMPANY

WELL NAME:

FEDERAL NO. 18-4

LOCATION:

NW/NW SECTION 18, T17S, R25E

FOOTAGE:

900' FNL - 350' FWL

COUNTY:

GRAND

STATE:

UTAH

AREA:

SOUTH SAN ARROYO PROSPECT

ELEVATION:

GL 5541' - KB 5545'

SPUD DATE:

9/24/85

COMPLETION DATE:

9/30/85

DRILLING ENGINEER:

GLENN ROSS

WELLSITE GEOLOGY:

GEOLOGIST:

BILL NAGEL

DRILLING CONTRACTOR:

CARMACK WELL SERVICE, INC.

ROCKY MOUNTAIN GEO-ENGINEERING COMPANY

RIG:

RIG #20

TOOL PUSHER:

CHRIS CARMACK

HOLE SIZE:

12½" TO 330'; 7 7/8" TO T.D.

CASING RECORD:

8 5/8" TO 329'

AIR COMPRESSORS:

FRONTIER AIR DRILLING COMPANY

ELECTRIC LOGGING:

SCHLUMBERGER

TYPE OF LOGS RUN:

DIL-GR-SP, GR-FDC-CNL

OBJECTIVE:

DAKOTA, MORRISON

TOTAL DEPTH:

4507'

STATUS:

RUN 412" PRODUCTION CASING

FEDERAL NO. 18-4 NW/NW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

WELL CHRONOLOGY	WFI	1		- (н	D	ሰ	N	IN	1	n	ß٧
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1985 DATE	MDNT DEPTH	FTG/ DAY	DAILY OPERATIONS
9/24	-0-	120	DRLG MOUSEHOLE - DRLG SURFACE - WORK HOLE - MIX MUD & DRL AHEAD
9/25	120	210	DRLG - POOH & RUN CSG - CMT CSG - WOC - DIG CELLAR
9/26	330	385	NIPPLE UP - RUN BLOOIE LINE - PRESS TEST - WAIT ON FLANGE - PRESS TEST BOP - DRLG CMT - DRLG AHEAD
9/27	715	1678	DRLG AHEAD
9/28	2393	590	WO SWIVEL - DRLG AHEAD
9/29	2983	1524	DRLG - CHG OUT SWIVEL - DRLG - REPAIR HYDRO HOSE - DRLG - MIST UP - DRLG AHEAD
9/30	4507	-0-	CIRC - MIX MUD - MUD UP - CIRC - SHORT TRIP - CIRC- POOH - RUN E-LOGS

BIT RECORD

WELL NAME: FEDERAL 18-4 ELEVATION	ON: _	GL 5541.	- KB 5545'
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CO. NAME: LONE MOUNTAIN PROD. CO. SECTION: S18-T17S-R25E

CONTRACTOR: CARMACK WELL SERVRIG# 20 CO. & STATE: GRAND, UTAH

SPUD DATE: 9/24/85 T.D. DATE: 9/30/8t

31 00	DAIE: _		7 2 47 00			•	DA1L.				DEVUA	TION
			BIT REC	ORD				F	T PER/DA	DEVIATION SURVEYS		
RUN	SIZE	MAKE	TYPE	XMX	FTG	HOURS	FT/HR	DATE	DEPTH	FT	DEPTH	DEV.
1	12 ½"		OSC	330	330	20 ½	16.1	9/24	-0-	120	151	1
2	7 7/8	SANDVIK	CFS30	4507	4177	67	62.3	9/25	120	210	305	1
				#				9/26	330	385	809	14
·				:				9/27	715	1678	1333	1/4
								9/28	2393	590	1834	1 ½
				:				9/29	2983	1524	2330	11
u - u				:				9/30	4507	- 0-	2826	11
			-								3323	11
								:			3852	2 3/4
											4507	4
-												
						-						
				;								
				:								
. <u>-</u>												
							:					
	,,											

LONE MOUNTAIN PRODUCTION COMPANY FEDERAL NO. 18-4 NWNW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

SAMPLE DESCRIPTIONS

2900-2940	100%	SH dkgy frm blky-plty
2940-2970	100%	SH AA w/occ slsdy & slty
2970-3000	100%	SH dkgy frm blky-plty /occ slslty
3000-3030	100%	SH dkgy frm blky-plty
3030-3090	100%	SH dkgy frm blky-plty /occ slslty
3090-3240	100%	SH dkgy frm blky-plty
3240-3270	100%	SH dkgy frm blky-plty /occ slslty
3270-3310	100%	SH AA
0270,0070	TR	BENT wh sft plty
3310-3400	100%	SH dkgy frm blky-plty /occ slslty
3400-3460	100%	SH dkgy frm blky-plty /occ slslty & sndy
3460-3490	100%	SH dkgy frm blky-plty /occ slslty
0,00	TR	CALC FRAG clr
3490-3535	100%	SH dkgy frm blky-plty
3535-3550	100%	SH AA
	TR	CALC FRAG clr
3550-3595		SH dkgy frm blky
3595-3610	100%	
3610-3625	100%	SH blk frm blky-plty
	TR	PYR
3625-3640	100%	SH AA
	TR	CALC FRAG clr
3640-3655	100%	SH AA
3655-3685	100%	SH blk frm blky-plty
3685-3715	100%	SH blk-dkgy frm blky-plty
3715-3730	100%	SH dkgy frm blky-plty
	TR	BENT wh sft plty
3730-3745	90%	SH AA
	10%	SS clr vfg mcmt msrt sbang-sbrd slarg
3745-3760	70%	SH dkgy frm blky-plty
	30%	SS ltgy vfg mcmt msrt sbang-sbrd glac incl sl arg
3760-3775	60%	SH AA
	40%	SS lt-mgy vfg mcmt msrt sbang-sbrd glac & pyr incl
3775-3790	80%	SH dkgy frm blky-plty slandy
	20%	SS AA
37903805	80%	SH AA
	20%	SS clr vfg-fg mcmt msrt sbang-sbrd slarg
3805-3820	60%	SH AA
	40%	SS clr mgy vfg mcmt msrt sbang-sbrd mod-arg
3820-3835	70%	SH dkgy frm blky-plty /occ sdy
	30%	SS AA
3835-3850	70%	SH AA
	30%	SS mgy vfg mcmt msrt sbang-sbrd arg
****	TR	BENT whisft plty
3850-3865	100%	SH dkgy frm blky-plty /occ sdy
2000 2000	ABNT	BENT wh sft plty
3865-3880	80%	SH AA
	20%	SS clr vfg uncons msrt sbang
2020 2025	TR	BENT wh sft plty
3920-3935	80%	SH AA
	20%	SS clr-ltgy vfg p-mcmt msrt sbang-sbrd
	ABNT	BENT wh-ltbrn sft plty

```
SS ltgy vfg m-wcmt m-wsrt sbang-sbrd slcalc
3935-3950
            100%
            100%
                   SS clr f-vfg uncons m-wsrt sbrd
3950-3985
                   SH dkgy-blk frm blky-plty
            100%
3985-4000
                   SH AA
             70%
4000-4015
             30%
                   SS AA
                   NO RETURNS (HOLE DAMP)
4015-4045
                   SH dkgy occ ltgy frm-hd blky-plty
             50%
4045-4060
                   SS ltgy f-vfg wcmt msrt sbang-sbrd sil-cmt occ arg
             50%
             70%
                   SH AA
4060-4075
                   SS ltgy-clr vfg wcmt msrt sbrd sil-cmt arg
             30%
                   SH ltgy red ltgn frm-hd blky-plty occ slsdy
4075-4090
             80%
             20%
                   SŞ AA
             80%
                   SH AA
4090-4105
                   SS clr vfg wcmt m-wsrt sbang-sbrd sil-cmt
             20%
            100%
                   SH AA
4105-4120
4120-4135
             80%
                   SH AA
                   SS wh vfg wcmt m-wsrt sbang-sbrd sil-cmt cly fl
             20%
                   SH ltgy occ red-mar frm-hd blky-plty occ sdy
4135-4150
             80%
             20%
                   SS AA
             80%
                   SH AA /occ purp
4150-4165
                   SS wh-ltgy vfg wcmt m-wsrt sbrd sil-cmt slarg
             20%
                   SH ltgy-ltgn red purp hd-frm blky-plty
4165-4195
            100%
4195-4210
             90%
                   SH ltgy-ltgn red hd-frm blky-plty
                   SS clr-wh vfg wcmt msrt sbrd occ SH INCL
             10%
                   SH ltgy red ltgn hd-frm blky-plty
             90%
4210-4225
             10%
                   SS AA
4225-4240
             80%
                   SH AA
                   SS clr-wh f-vfg wcmt sil-cmt msrt sbrd occ cly fl
             20%
                   SH ltgy-ltgn red pnk sft-hd blky-plty occ slty
             90%
4240-4255
             10%
                   SS AA
                   CHT FRAG gn hd
              TR
                   SH red ltgy-ltgn frm-hd blky-plty occ slty
            100%
4255-4270
4270-4385
             90%
                   SH AA
                   SS pnk vfg wcmt m-wsrt sbrd sil-cmt
             10%
                   SH red mar purp ltgy-ltgn frm-hd blky-plty occ slty
4285-4300
            100%
4300-4315
             90%
                   SS wh-clr vfg wcmt sil-cmt msrt sbrd
             10%
                   SH red frm blky-plty occ slty
4315-4345
            100%
                   SH AA
4345-4360
             90%
             10%
                   SS clr vfg wcmt sil-cmt sbang-sbrd
                   SH red mar purp frm-hd blky-plty occ slty
4360-4375
             80%
                   SS clr-whivfg wcmt sil-cmt msrt sbang-sbrd
             20%
4375-4390
             70%
                   SH AA
                   SS clr-wh vfg wcmt sil-cmt msrt sbang-sbrd slarg
             30%
                   SH red ltgy purp frm-hd blky-plty slslty
             60%
4390-4405
                   SS ltgy vfg wcmt silcmt wsrt sbrd occ slarg
             40%
                   SS clr-ltgy ltgn vfg wcmt wsrt sbrd slty
4405-4420
             60%
                   SH AA
             40%
                   SS AA
             60%
4420-4435
                   SH red ltgy purp ltgn frm blky-plty
             40%
                   SS ltgy-clr vfg m-wcmt sil cmt m-wsrt sbrd-sbagn
4435-4450
             50%
             50%
                   SH ltgy-ltgn frm-dh blky-plty
                   SH red ltgy-ltgn frm-hd blky-plty slslty
             70%
4450-4465
                   SS AA
             30%
4465-4480
             70%
                   SH AA
             30%
                   SS clr vfg m-wcmt msrt sbang-sbrd
```

LONE MOUNTAIN PRODUCTION MPANY FEDERAL NO. 18-4 SAMPLE DESCRIPTION CONTINUED

4480-4495	70%	SH red ltgy-ltgn frm-hd blky-plty slslty
	30%	SS AA
4495-4507	80%	SH AA
	20%	SS ltgy-clr vfg m-wcmt msrt sbang-sbrd

LONE MOUNTAIN PRODUCTION COMPANY FEDERAL NO. 18-4 NW/NW SECTION 18, T17S, R25E GRAND COUNTY, UTAH

	FORMATION 7	ΓΟΡS	
FORMATION	SAMPLE	E-LOG	DATUM
MANCOS	SURFACE		
FRONTIER	3570'	3548'	+1997
DAKOTA SILT	3842'	38251	+1720
DAKOTA	3906'	3890'	+1655
MORRISON	4080'	4032'	+1513
SALT WASH	4385'	4363'	+1182

GEOLOGIC SUMMARY AND ZONES OF INTEREST

Lone Mountain Production Company's Federal No. 18-4 well was a Dakota and Morrison test. The well was located in the NW/NW Section 18, T17S, R25E of Grand County, Utah. Spudded in the lower Mesaverde Formation on September 24, 1985, the well was drilled to a total depth of 4507' in the Salt Wash Member of the Morrison Formation on September 30, 1985. Production casing was run to the total depth.

MANCOS FM (SURFACE - 35481)

The Mancos Formation consisted of dark gray, firm, blocky to platy shale. This shale was occasionally silty and sandy with traces of calcite crystals.

There were no gas shows in the lower Mancos Formation. Background gas was 2 units and connection gas recorded 90 to 180 units.

FRONTIER FM (3548' - 3828')

The Frontier Formation was predominantly shale with beds of sandstone near the base. The shale was black, dark gray, firm, blocky to platy and was occasionally silty with traces of bentonite. At 3510' the Frontier Shale began changing to black from a dark gray. The sandstone was light to medium gray, clear, very fine grained, medium cemented, medium sorted, subrounded to subangular and argillaceous with occasional glauconite inclusions.

Two gas shows noted in the Frontier Shale occurred at 3623'-3630' of 38 units and at 3765'-3771' of 10 units. Background gas ranged between 2-10 units and connection gas was noted from 90-220 units.

DAKOTA SILT (3825' - 38901)

The Dakota Silt was composed of interbedded sandstone and shale. The sandstone was medium gray, clear, very fine grained, unconsolidated-medium cemented, medium sorted, subangular-subrounded and slightly argillaceous. Shale was dark gray to black, firm and blocky to platy.

There were no gas shows noted in the Dakota Silt. Background gas was 2 units and connection gas was 150 units.

DAKOTA FM (3890' - 4032')

The Dakota Formation contained three sandstone beds with shale inbetween the beds. The top sandstone bed at 3904'-3919' was a clear, very fine grained, unconsolidated, medium sorted and subangular sandstone. A gas show of 150 units was noted during the drilling of this sandstone. Although there was no flare during this gas show, the next connection gas of 450 units did flare. Electric logs showed this sandstone to have very good crossover with an average of 10% porosity.

The second sandstone of the Dakota was at 3940'-3973'. This sandstone was clear, light gray, very fine to fine grained, unconsolidate, medium to well sorted and subrounded to subangular. During the drilling of this sand interval, the gas increased to 230 units with no flare. Connection gas increased to 700 units with flaring continuing until T. D. Electric logs showed this zone to have very good crossover with an average of 11% porosity.

LONE MOUNTAIN PRODUCTION CO. FEDERAL NO. 18-4
GEOLOGIC SUMMARY CONTINUED

The last Dakota sandstone bed occurred at 3998'-4019'. This sandstone was clear, very fine to fine grained, unconsolidated, medium to well sorted and subrounded. The hole became wet during the drilling of this zone and it became necessary to start drilling with air mist. There were no gas shows noted in this sandstone interval. Electric logs showed the sandstone bed to be wet.

MORRISON FM (4032' - T.D.)

The upper member of the Morrison, the Brushy Basin (4032'-4363'), was composed primarily of shale with occasional sandstone beds. The shale was light gray, light green, red, purple, maroon, soft to hard, plty to blocky and occasionally sandy. The sandstone was clear, white, pink, very fine grained, well cemented, medium to well cemented and subrounded to subangular. There were no gas shows noted in the Brush Basin Member. Background gas was 135-150 units and connection gas was 400-600 units.

The lower member of the Morrison, the Salt Wash (4363' - T.D.), contained interbedded sandstone and shale. The sandstone was light gray, and clear, white, very fine grained, medium to well cemented, medium to well sorted and subangular to subrounded. A gas increase of 45 units was noted in the Salt Wash at 4445'-4455'. Background gas was 135-180 units and connection gas was 420-500 units.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 4241 State Office Building Salt Lake City, UT 84114



TO 7 1985

WYSION UNA

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name &	Number	Federa	l No.	18-4								
Operator_L	one Mountai	in Produ	ction	Co.	Address	P.O.	Вох	3394	, Billi	ngs, MT 5	9103	
Contractor_	Carmack Wel	ll Servi	ce		_Address	2154	Hwy	6450,	, Grand	Junction	, co	81505
Location N	W 1/4 NV	1/4	Sec.	18	T. 178	R		5Ε (County_	Grand		
Water Sands												
Ī	Depth			Volume	:		ν. ν	Que	ality			
Fron	n To		Flow	Rate o	r Head		1	Fresh	or Sal	ty		
1NON	NE									•		
2												
3										, <u>90 - 200-207-2</u> 9-7-		
4												
5						·						
	(Co	ntinue (n rev	erse s	ide if ne	ecessa	ry)			· · · · · · · · · · · · · · · · · · ·		
Formation To	D	akota Si akota Sa Jorrison			3815 3904							
Remarks		atl Wash	า		4030 4364		a .					

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
 - (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

Form 3160-4 (November 1983) (formerly 9-330)

D STATES

SUBMIT IN DUPLICA

(See other Instructions on reverse side)

			proved.			
					1004-0	137
	Exp	ires	August	: 31,	1985	
5,	LEASE	DESI	GNATION	AN [SERIAL,	NO.

approved. et Bureau) es August	4			
SIGNATION	AND	SERIAL,	NO.	
3				,

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	BUREAU OF LAND MANAGEMENT												
WELL CC	OMPLE	TION	OR	RECO	MPLET	TION F	REPORT	-AN	6, 4,0 0	—— 入*	6. IF INDIAN,	ALLC	OTTRE OR TRIBE NAME
1a. TYPE OF WE	ELL:	OIL WEI		GAS WELL,	$\overline{\mathbf{X}}$	DRY 🗌	Other	Ut		U —	7. UNIT AGRE	EMEN	T NAME
b. TYPE OF CO	MPLETIO	N:		W F.L.I.		DAT 1	Ottler				Winter	Cam	ın
NEW X	WORK OVER	DEF	(P)	PLUG F	DUE RE	SVR.	Other O	CT 3	0 1985		S. FARM OR I	EASE	P.AME
2. NAME OF OPER	ATOR										Federal		
LONE MOUN	NTAIN I	PRODUC	TION	1 COMPA	NΥ		i 1 1	nsio	N OF O	L.L.I	9. WELL NO.		
3 ALLEDESS OF AD	FPATOR							_	– . –		18-4		
P.O. Box	3394,	408 F	etro	oleum B	uildi:	ng, Bi	llings,	MT	59103) 	10. FIELD AN	D POO	DL, OR WILDCAT
4. LOCATION OF W	ELL (Repo	rt locati	on clear	rly and in	accordance	ce with an	y State requ	iremen	ts)*		Undesig	nat	ed
At surface	350' FI	WE, 90)O' F	NL							11. SEC., T., F OR AREA	t., M.,	OR BLOCK AND SURVEY
At top prod. it	nterval re	ported be	low										
	Same										NW# NW#	Se	c.18-T17S-R25
At total depth	Same				1 14 P	ERMIT NO.		DATE	ISSUED		12. COUNTY O	. <u>.</u>	13. STATE
3	anie				<u>-</u>			ļ.	_		PARISH	/IL	
5. DATE SPUDDED	116 54	and min n	BLOUS:	D 17. DAT		<u>019-31</u>			/29/85		Grand	10	RLEV. CASINGHEAD
	1		BACHEL								T, GR, ETC.)*	l	_
9/24/85 20. total depth, mi	9/30	_	0 840	T.D., MD &	0/23/8		TIPLE COMP		GL, 5!		B ROTARY TOO		CABLE TOOLS
	ν ετ 1 ΑΩ	1 .		, s.u., retu de	112 2	HOW M	ANY*	,		LED BY			1
4507 24. PRODUCING INT	EDVAL/A)		+131	ETION- TO	P ROTTON	NAME (1	ID AND TWO	,	<u> </u>	-> !	O-TD	-1-2	None
FRODUCING INT	EGYAL(S),	or inis	COMPL	5110A-101	, bollom	., (1	*** W***D IAD	,				~	SURVEY MADE
Dolone Ce	· 4 - 4	200	J. 20	200 20	dia sa	70							5.1
Dakota Sa 26. TYPE ELECTRIC				120, 39	40-39	12						27 1	NO WAS WELL CORED
and the second s				ים כחו	VDI	ا بين شام	و المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة					21. '	
GR-FDC-CN	VL, 5P	-6K-DI	L, 6										No
CASING SIZE	l men	CHT. IB	/mm				ort all strin	ge set :		IENTING	PECOPU		1
		GHT, LB./	FT	DEPTH SI	ST (MD)		LE SIZE	-					AMOUNT PULLED
8-5/8"	247			329		124	<u> </u>	— I———			s H(to su		
411	10	·5#		4169		7-7/8	<u> </u>	_ _1	<u>75 sx.</u>	thix	otropic (to	<u> 3460) None</u>
				-				_					
 	ļ					1		<u> </u>	1				<u> </u>
29.				RECORD			1		30.		TUBING RECO		
SIZE	TOP (MD)	вотто	OM (MD)	SACKS (CEMENT*	SCREEN (MD)	SIZE DEPTH SET (D)	PACKER SET (MD)
None					-				1 1 11	_	4008 KB		None None
M	<u> </u>				<u> </u>		<u> </u>		<u> </u>	1			<u> </u>
31. PERFORATION R	- •			•			32.				URE, CEMENT		
131"dia							DEPTH I		T (MD)				MATERIAL USED
3947, 395	52, 396	52, 35	<i>b</i> /;	6 hole	s tota	aı.	3909-				gallons		
							3909-3	1967					with 83,920
													ity foam;20,0
						Dto	TIOMICE			·		α,	80,000# 20-40
ATE FIRST PRODUC	CTION	PRAN	CCTION	METHOD /	Flowing		OUCTION umping—siz	e and 1	tupe of our	san		87471	US (Producing or
10/12/85	- 4 av 17	1				g = 0 +*/+, 1/1	p 111y 614	- w(a 1	-gpooj pan			t-in)	
ATE OF TEST	Marine	TESTED	lowi	ng Hoke size	PROT	o'N, FOR	OILBBI,		GAS - MC	CF.	WATERBBL		hut-In
10/23/85	26	_		111		PERIOD	0		1484		1 -	•	
LOW. TUBING PRESS	1	PRESSU	 	ALCULATED		-BBI		-MCF.	1 1402	WATER-	0 -BBL	OTT	GRAVITY-API (CORR.)
230 psig	1 .	psic	1 24	4-HOUR RAT		0	1		1	"AILK"	_	UIII (
230 PS19				ented etc	1		j	370			O TEST WITNES	.grr	RY
Vented	DAUG/ CARD	, watu jui	, 14€#, 1°	·	,								
	UNTERNA			 							Dave T	err	E11
None: loc		0155	c+-		_ h	a ha==	4224	:	4.1. leave	. L .			antas
None; log													
6. I hereby certif		\circ	ug and	attached i	nrormatic	on 18 comp	uete and co	rrect a	s defermin	eu Irom			
SIGNED 9	mes D	- 1/2	Milos	ርጉ		TITLE PO	etroleu	m En	gineer		ከ≜ ጥ ጀ	c	10/25/85
SIGNED		. Y		*	r						DATE		

	ď	TRUE VERT, DEPTH	same same same same same	
GEOLOGIC MARKERS	TOP	MEAS, DEPTH	Surface 3548 3815 3904 4030 4364	
38. GEOI		NAME	Mancos Frontier Dakota Silt Dakota Sand Morrison Salt Wash (Morrison)	
ES: (Show all important zones of porosity apth interval tested, cushion used, time to	DESCRIPTION, CONTENTS, ETC.	ļ	Tight gas Tight-damp with water	
	BOTTOM	000	3972 4030	
	TOP	-	3998	
drill-stem, tests, i recoveries):	FORMATION		Dakota Dakota Dakota	

Form 3160~5 (November 1983) (Formerly 9—331) DEF	UNITED STATES PARTMENT OF THE IN	SUBMIT IN TRIF (Other instruction ITERIOR verse side)	Expires Aug	ed. au No. 1004-0135 ust 31, 1985
	BUREAU OF LAND MANAG		U-38033	
				TTEE OR TRIBE NAME
	NOTICES AND REPO or proposals to drill or to deepen of APPLICATION FOR PERMIT—" for		oir.	
I. OIL GAS [V]		RECEIV	7. UNIT AGREEMENT	NAME
	OTHER	i iiiori"	Winter Car 8. FARM OR LEASE	NAME
LONE MOUNTAIN PRO	DUCTION COMPANY	NOV 0 4 198	85 Federal	
ADDRESS OF OPERATOR			9. WELL NO.	
P.O. Box 3394, 40	08 Petroleum Building	, Billings, MT 59103	3 18-4	
 LOCATION OF WELL (Report le See also space 17 below.) At surface 	ocation clearly and in accordance w	of the day State registration of GAS & MINI		
350' FWL, 900' FN	IL, Section 18	atove	11. SEC., T., B., M., SURVEY OR A	OR BLE. AND
			NW4 NW4 S	ec. 18-T17S-R25
4. PERMIT NO.	15. ELEVATIONS (Show wi		12. COUNTY OF PAR	
43-019-31196	5541 GL, 5545	KB	Grand	Utah
^{6.} Ch	eck Appropriate Box To Indi	cate Nature of Notice, Rep	port, or Other Data	
NOTICE	OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	BEPAIRI	G WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTUBE TREATM	SENT ALTERIN	CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACID		MENT*
REPAIR WELL	CHANGE PLANS		Status Report or results of multiple completi	X
7. DESCRIBE PROPOSED OR COMPL	ETED OPERATIONS (Clearly state all directionally drilled, give subsurfa	pertinent details and give pertin	or Recompletion Report and Log	data of etanting any
Shut in, waiting	on pipeline.			
3. I hereby certify that the for				
SIGNED James 2	- Pouter TITE	E Petroleum Enginee	er DATE 10	/31/85

*See Instructions on Reverse Side

DATE ___

TITLE _

(This space for Federal or State office use)

						Form approved	~ Budget Bureau	No. 1004-0138 Expi	ires August 31, 1985		
	UNITED	STAT	ES		L	ease No	u-38033				
	DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT Form 3160-6 (November 1983) (Formerly 9-329) MONTHLY REPORT OF OPERATIONS					Communitization Agreement No. Field Name Undesignated Unit Name None Participating Area None (spaced area is N½ Section 18) County Grand State Utah Operator Lone Mountain Production Company					
			_			Amended R	•	•	vells) for the mont		
basis fo	or recommend	port car	resulti:	J.S.C. 189, n the asses the lease or Well	30 U.S.C. ssment of I nd forfeit th	iquidated damag e bond (43 CFR *Barrels	396d), regulation es, (43 CFR 3160 3160).), penalties, shutting	ond the terms of the g down operations, or Remarks		
No. 18-4	14 of 14	170	255	Status	Prod.	of Oil	Gas	of Water			
10-4	NW1 NW1 Sec. 1	178	25E	DRG	0				•		
								RECEIV	ED		
								NOV 0 4 19	85		

DIVISION OF OIL GAS & MINING

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		xxxxxxxxxxxxxxx	XXXXXXXXXXXXXXXXX
*Produced			
*Sold			×××××××××××××××××××××××××××××××××××××××
*Spilled or Lost		×××××××××××××××××××××××××××××××××××××××	XXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXX
*Used on Lease			******
*Injected			
*Surface Pits	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	
*Other (Identify)			
*On hand, End of Month		XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
*API Gravity/BTU Content			XXXXXXXXXXXXXXXX
Authorized Signature:	Address: F	.O. Box 3394, Bill	ings, MT 59103
Title: Office Manager	•	Page of	1

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form approved -	Budget	Bureau No.	1004-0138	Expires	August	31,	1985
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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT OF OPERATIONS

Lease No.	U-38033	_				
Communitizat	ion Agreeme	ent No				
Field Name <u>U</u>	<u>ndesignate</u>	<u>d</u>				
Unit Name N	one	,				
Participating A	Area <u>None</u>	(spaced	area	is N½	Section	18)
County	rand			tata	Utah	
OperatorL	one Mounta	in Produ	uction	Compa	any	
M Amended B						

The following is a correct report of operations and production (including status of all unplugged wells) for the month of <u>September</u> 19.85

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Sec. & 1/4 of 1/4	TWP	RNG	Well _Status	Days Prod.	*Barrels of Oil	•MCF of Gas	*Barrels of Water	Remarks
NW¼ NW¼ Sec. 18	178	25E	DRG	0				
·						REC	EIVED	
						NOV	06 1985	
						,		
	% of 1/4 NW1/4 NW1/4	% of % NW4 NW4 17S	NW4 NW4 17S 25E	\(NW\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	% of % .Status Prod. NW½ NW½ 17S 25E DRG 0	% of % .Status Prod. of Oil NW1/4 NW1/4 17S 25E DRG 0	NW 1 NW 1 17S 25E DRG 0 REC NOV	% of % Status Prod. of Oil Gas of Water NW1/4 NW1/4 17S 25E DRG 0

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		xxxxxxxxxxxxxxx	*****
*Produced			
*Sold			xxxxxxxxxxxxxxx
*Spilled or Lost		xxxxxxxxxxxxxxx	XXXXXXXXXXXXXXXXX
*Flared or Vented	<u> </u>		xxxxxxxxxxxxxxx
*Used on Lease			*****
*Injected	***		
*Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXX	
*Other (Identify)			
On hand, End of Month		xxxxxxxxxxxxxxx	xxxxxxxxxxxxxx
*API Gravity/BTU Content			*******
Authorized Signature:	multauf Address:	P.O. Box 3394, Bill	lings, MT 59103
Title: Office Manager	·	Page 1 of	

Form approved -	Budget	Bureau No.	1004-0138	Expires	August 31, 1985	

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT OF OPERATIONS

Lease No	<u>U-380</u> ;	33	****			
Communitiza	ation Agree	ement No				
Field Name_	<u>Undesigna</u>	ated				
Unit Name _	None					
Participating	AreaNor	ne (spaced	area is	N½	Section	18)
County	Grand		Stat	te .	Utah	
Operator	Lone Mour	ntain Prod	uction C	ompa	any	
M Amended						

The following is a correct report of operations and production (including status of all unplugged wells) for the month of October 19.85

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well _Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
18-4	NW¼ NW¼ Sec. 18	178	25E	GSI	0				
	,						٩E	CEIVED	
						:	NO	/ 06 1985	
į							JIVI GA:	SION OF OIL	

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		XXXXXXXXXXXXXXXX	******
*Produced			
*Sold			XXXXXXXXXXXXXXXX
*Spilled or Lost		XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXX
*Used on Lease			XXXXXXXXXXXXXXXX
*Injected			
*Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	
*Other (Identify)		·	
*On hand, End of Month		XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXX
*API Gravity/BTU Content) _4		XXXXXXXXXXXXXXXX
Authorized Signature: Donne To Title: Office Manager		Page 1 of	

LONE MOUNTAIN PRODUCTION COMPANY

P.O. Box 3394 408 Petroleum Building Billings, Montana 59103-3394 (406) 245-5077



DIVISION OF OF

November 4, 1985

Division of Oil, Gas, & Mining 4241 State Office Bldg. Salt Lake City, UT 84114

> Re: Federal No. 18-4 Well Lease No. U-38033 Winter Camp Unit

> > NW_{4}^{1} NW_{4}^{1} Section 18-T17S-R25E

Grand County, UT

Gentlemen:

The above captioned well is a "tight hole". Please place it on "confidential" status.

Thank you.

Very truly yours,

LONE MOUNTAIN PRODUCTION COMPANY

Thomas M. Hauptman

TMH:bp

Form 3160-5 (November 1983) (Formerly 9-331)	UNIOD DEPARTMENTOF BUREAU OF LAN	THE INTERIC	SUBMIT IN TRIPI (Other instructions) R verse side)		No. 1004-01:5 31, 1985
	ORY NOTICES AN			6. IF INDIAN, ALLOTTE	OR TRIBE NAME
OIL GAS WELL C. NAME OF OPERATOR	OTHER		DEC 0 5 1985	7. UNIT AGREEMENT NA Winter Camp 8. PARM OR LEASE NAM	
LONE MOUNTAIN 3. ADDRESS OF OPERATOR P.O. Box 3394, 4. Location of well (Rej See also space 17 below At surface	PRODUCTION COMPAI 408 Petroleum B port location clearly and in FNL, Section 18	ldg., Billings	DIVISION OF O L. MTG \$ 3 MINING	Federal 9. WHILE NO. 18-4 10. FIELD AND POOL, OI Undesignated 11. SEC., T., E., M., OR B SURVET OR ARMA	R WILDCAT
14. PERMIT NO. 43-019-31196	!	ONS (Show whether DF, R	T, CR, etc.)	NW4 NW4 Sec. 12. COUNTY OR PARISH Grand	•
16.	Check Appropriate E	lox To Indicate Na	ture of Notice, Report, or (Other Data	
proposed work. If we nent to this work.)	MULTIPLE COM ABANDON* CHANGE FLANS	PLETE	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) Status Rep (Note: Report result Completion or Recompletion or Recompletion or Recompletion and give pertinent dates and measured and true vertices.	s of multiple completion obligation Report and Log for	on Well
·					
18. I hereby certify that th	ne foregoing is true and cor			10.4	0.495
SIGNED James G. (This space for Federal	Routson I or State office use)	TITLE Petr	oleum Engineer		2/85
APPROVED BY	ROVAL, IF ANY:	TITLE		DATE	

November 1983) UNITED STATES SUBMIT IN TRIPLICATE* (Other Instructions of re-	Budget Bureau No. 1004-0135 Expires August 31, 1985 5. LEASE DESIGNATION AND SERIAL NO
BUREAU OF LAND MANAGEMENT	U-38033
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1.	7. UNIT AGREEMENT NAME
OIL CAS WELL OTHER	Winter Camp
2. NAME OF OPERATOR	S. FARM OR LEASE NAME
LONE MOUNTAIN PRODUCTION COMPANY	Federal
3. ADDRESS OF OPERATOR	9. WELL NO.
P.O. Box 3394, 408 Petroleum Building, Billings, MT 59103	18-4
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)	10. FIELD AND POOL, OR WILDCAT
At surface	Undesignated
350' FWL, 900' FNL, Section 18	11. SBC., T., R., M., OR BLK. AND SURVEY OR AREA
	NW4 NW4 Sec. 18-T17S-R25E
14. FERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
43-019-31196 5541 GL, 5545 KB	Grand Utah
16. Check Appropriate Box To Indicate Nature of Notice, Report, or C	Other Data
	ENT REPORT OF:
	7
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	BEPAIRING WELL
FRACTURE TREAT NULTIPLE COMPLETE FRACTURE TREATMENT	ALTERING CASING
REPAIR WELL CHANGE PLANS (Other) Status Report	ABANDONMENT*
(NorE: Report results	of multiple completion on Well etion Report and Log form.)
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical near to this work.)* Shut in Waiting on pipeline.	d depths for all markers and zones perti-
RECEIVE	D
JAN 06 198	6
BIVIDION OF	
18. I hereby cornify that the foregoing is true and correct	7-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
SIGNED James D. Janton Petroleum Engineer	DATE 1/3/86
/ James G. Routson	
(This space for Federal or State office use)	
APPROVED BY	DATE

Ferm 3160-5
(November 1983)
(Formerly 9-331)

(Other)

UNITED STATES DEPARTMENT F THE INTERIOR SUBMIT IN TRIPLIA (Other Instructions reres and experience)

5. LEASE DESIGNATION AND SERIAL	MA
Expires August 31, 1985	
Budget Bureau No. 1004-	11:

LEASE DESIGNATIO		
Expires Augus	st 31, 1985	

_	Expires August	31,	1985		
١.	LEASE DESIGNATION	AND	BERIAL	MO	

BU	REAU OF LAND MANAGEMENT	COOOTI	U-38033		
SUNDRY A (Do not use this form for use "AP	G. IF INDIAN, ALLOTTE	E OR TRIBE NAME			
OIL GAS WELL OTH	ER .		7. UNIT AGREEMENT NA Winter Camp	ME	
. NAME OF OPERATOR			8. FARM OR LEASE NAME		
LONE MOUNTAIN PROD	UCTION COMPANY		Federal		
. ADDRESS OF OPERATOR			9. WELL NO.		
P.O. Box 3394, 408	18-4				
. LOCATION OF WELL (Report loca See also space 17 below.) At surface	tion clearly and in accordance with any Si	ate requirements.*	10. FIELD AND POOL, O	R WILDCAT	
350' FWL, 900' FNL	, Section 18		11. SEC., T., R., M., OR I SURVEY OR AREA	BLE. AND	
			NWł NWł Sec.	18-T175-R25E	
4. PERMIT NO.	15. ELEVATIONS (Show whether Dr. R	T. GR. etc.)	12. COUNTY OR PARISH	13. STATE	
43-019-31196	5541 GL, 5545 KB		Grand	Utah	
6 Chec	k Appropriate Box To Indicate Na	ture of Notice, Report, or	Other Data		
NOTICE OF	INTENTION TO:	50855	QUENT REPORT OF:		
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING V	WELL	
FRACTURE TREAT	MULTIPLE COMPLETE	PRACTURE TREATMENT	ALTERING C.	ASING	
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONME		
REPAIR WELL	CHANGE PLANS	(Other) Status Repo	ort	<u>X</u>	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and gones pertinent to this work.) *

Shut in -- Waiting on pipeline.

RECEIVED

(Nork: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

AUG 04 1986

TIO 40 MOIGINIC GAS & MINING

signed James G. Routson	TITLE Petroleum Engineer	DATE	7/31/86
(This space for Federal or State office use)			
APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	TITLE	DATE	

Ferm 3160-5 (November 1983) (Formerly 9-331)

SUBMIT IN TRIPLIC (Other instructions

Budget Bureser No. 1004-0135 Expires August 31, 1985 LEASE DESIGNATION AND SERIAL NO.

ALL THE HATELLON	Verse West of the	o. Coase Designation
BUREAU OF LAND MANAGEMENT		U-38033
		R IN THOMAS ALLOWER

В	UREAU OF LAND MANAGEMENT	COOOLI	U-38033		
	NOTICES AND REPORTS C proposals to drill or to deepen or plug be PPLICATION FOR PERMIT—" for such pro		6. IF INDIAN, ALLOTTE	E OR TRIBE NAME	
			7. UNIT AGREEMENT N	AME	
WELL GAS WELL OT	HER		Winter Camp		
NAME OF OPERATOR		· · · · · · · · · · · · · · · · · · ·	8. FARM OR LEASE NA	MI	
LONE MOUNTAIN PRO	DUCTION COMPANY		Federal		
ADDRESS OF OPERATOR			9. WELL NO.		
P.O. Box 3394, 40	8 Petroleum Building, Bil	lings, MT 59103	18-4		
LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface			10. FIELD AND POSE, O	R WILDCAT	
350' FWL, 900' FN	350' FWL, 900' FNL, Section 18		11. SEC., T., B., M., OR BLE. AND SURVEY OR AREA		
			NW1 NW1 Sec.	='	
4. PERMIT NO.	15. ELEVATIONS (Show whether DF,	RT, GR, etc.)	12. COUNTY OR PARISE	I 13. STATE	
43-019-31196	5541 GL, 5545 KB		Grand	Utah	
6. Che	ck Appropriate Box To Indicate No	ature of Notice, Report, or (Other Data		
NOTICE OF INTENTION TO:		subseq	BREQUENT REPORT OF;		
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING '	WELL	
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING C	ASING	
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONME		
REPAIR WELL	CHANGE PLANS	(Other) Status Repo		X	
(Other)		(NOTE: Report results Completion or Recomp	of multiple completion letion Report and Log fo	on Well rm.)	
 DESCRIBE PROPOSED OR COMPLE' proposed work. If well is nent to this work.) 	TED OPERATIONS (Clearly state all pertinent directionally drilled, give subsurface location	details, and give pertinent dates ons and measured and true vertice	, including estimated dat al depths for all marker	te of starting any s and zones perti-	

Shut in -- Waiting on pipeline.

RECEIVED

AUG 04 1986

110 40 MOIGINIC GAS & MINING

18.	signed James G. Routson	TITLE Petroleum Engineer	DATE	7/31/86
==-:	(This space for Federal or State office use)			
	APPROVED BY CONDITIONS OF APPROVAL, IF ANY:	TITLE	DATE	

Form 3160-5 (November 1983) (Formerly 9-331)	UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAGE	ITERIOR TOTHER	t in TRIPLICATE red	Budget Burean II Expires August ; 5. Leabe designation a U-38033	11, 1985 NO BERIAL NO
(Do not use this	IDRY NOTICES AND REPORT FOR THE PROPERTY OF TH	RTS ON WELL or plug back to a diffe or auch proposals.)	LS rent reservoir.	6. IF INDIAN, ALLOTTEE 7. UNIT AGREEMENT NAS	
OIL GAR WELL WELL OTHER			Winter Camp		
	IN PRODUCTION COMPANY		A LAVIA WALLES	Federal	
P.O. Box 33	94, 408 Petroleum Building	, Billings, b	T 59103	18-4	
4. LOCATION OF WELL (See also space 17 be At surface	Report location clearly and in accordance work.)	ith any State requires	ments.*	10. FIELD AND POOL, OR	WILDCAT
350' FWL, 9	00' FNL, Section 18			NW4 NW4 Sec.	
14. PERMIT NO.	15. ELEVATIONS (Show w	hether DF, RT, OR, etc.)		12. COUNTY OR PARISI	13. STATE
43-019-3119	6 5541 GL, 554	15 KB		Grand	Utah
16.	Check Appropriate Box To Ind	icale Nature of N	otice, Report, or C	Other Data	
	NOTICE OF INTENTION TO:	1	វិទ្ធភិគិបន	ENT EMPORT OF:	

NOTICE OF INTENTION TO:		SUBSEQUENT EMPORT OF:		
TEST WATER SHUT-OFF PULL OR ALTER CASING FRACTURE TREAT MULTIPLE COMPLETE ABANDON* REFAIR WELL CHANGE PLANS		WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other)		
(Other) Notice of first delivery	[X]	(Nork: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)		

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and sones pertinent to this work.) *

First delivered to Northwest Pipeline 9/11/86 at 11:00 A.M. Verbal notification phoned to Steve Jones, BLM, Moab District Office at 4:15 P.M. on 9/11/86.



DIVISION OF OIL. GAS & MINING

8IGNED Ames G. Routson (This space for Federal or State office use)	Petroleum Engineer	рати 9/12/86
(This space for Federal or State office use)		1
APPROVED BY	TITLE	DATE